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Over the past 12 years, the Congress has made more than \$7 billion available for population programs in developing countries. A major part of these funds has been used to finance population programs of the United Nations, private international organizations, and universities. Findings/Conclusions: Although there has been a growing awareness of population problems and some progress in controlling them, birth rates must fall faster in order to achieve stability in world population. In the countries studied, contraceptive use was much lower than that considered necessary for population stability. The Agency for International Development (AID) has focused on providing family planning information and services, but it has not given sufficient emphasis to studies about linkages between fertility and development. AID has revised its population policy to place greater emphasis on social and economic change to influence birth rates. This policy, and congressional provisions requiring that development projects be designed to motivate smaller families, have not yet been implemented. Some constraints have been: lack of an entity dedicated to integrating population and development assistance, the variety of views within AID, and insufficient development of organizational and financial arrangements. Recommendations: the Administrator of AID should establish an organizational structure under leadership that will emphasize integrating population and development assistance and developing knowledge needed to carry out such an approach. Development and use of mission-level expertise is essential for this purpose. International, private, and voluntary organizations should be encouraged to consider population and development assistance relationships and the need to plan programs and projects accordingly. In the Sahel development, the Administrator of AID should incorporate considerations of population growth-development interrelationships, support projects associated with reduced fertility, and encourage family

planning in the context of maternal and child health programs.  
(HTW)

58915  
BY THE COMPTROLLER GENERAL

# Report To The Congress

OF THE UNITED STATES

## Reducing Population Growth Through Social And Economic Change In Developing Countries--A New Direction For U.S. Assistance

Agency for International Development programs to help slow rapid population growth in developing countries have focused on providing family planning services. There has been progress but use of family planning services has not reached levels needed to achieve an acceptable stabilized world population.

Social and economic conditions in developing countries encourage large families. Little has been done by the Agency to structure development assistance to influence reduction in family size. This report recommends integrating population and development assistance and discusses the difficulties in doing so.



ID-78-6

APRIL 5, 1978



COMPTROLLER GENERAL OF THE UNITED STATES  
WASHINGTON, D.C. 20548

B-156518

To the President of the Senate and the  
Speaker of the House of Representatives

This report addresses the need for integration of the population and development assistance programs of the Agency for International Development in order to influence fertility through social and economic change in developing countries.

We made our review pursuant to the Budget and Accounting Act, 1921 (31 U.S.C. 53), and the Accounting and Auditing Act of 1950 (31 U.S.C. 67).

Copies of this report are being sent to the Secretary of State and the Administrator, Agency for International Development.

  
Comptroller General  
of the United States

D I G E S T

Economic assistance programs of the Agency for International Development seek to improve the quality of life of people in developing countries. Voluntary reduction of birth rates has played an increasingly important role in this effort.

To this end, over the past 12 years the Congress has made more than \$1 billion available for population programs. Funds, technical assistance, and commodities have been provided to support population programs in developing countries.

A major part of these funds has been used to finance programs of intermediary organizations dealing with population problems of developing countries--the United Nations, private international organizations, and universities. (See pp. 10 and 11.)

Awareness of the population growth problem is increasing; there has been progress in lowering birth rates. Although this report is not a chronicle or evaluation of the performance of the Agency's Office of Population, the efforts of the office have contributed significantly to these achievements.

However, birth rates must fall faster in order to achieve a lower ultimate stabilized world population. Many authorities advocate seeking social and economic change that would motivate people to have smaller families. This would involve structuring appropriate development programs to encourage a desire for fewer children and would complement the Agency's continuing efforts to increase the availability of family planning services. Historically, the Agency has focused on

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providing family planning information and services. It has not sufficiently emphasized the development of knowledge on the linkages between fertility and development adequate for designing country-specific development plans that would encourage lower fertility. Efforts to integrate population and development assistance have been limited. (See pp. 29 to 36 and 71 to 76.)

Most experts believe that 60 to 70 percent of the reproductive-age women must use contraceptives to achieve population stability. GAO did not find that use of contraceptives approached this magnitude in developing countries its auditors visited. Estimated contraceptive use ranged from not more than 5 percent in Ghana to about 40 percent in Colombia. (See pp. 15 to 28.)

The Agency has recognized that family planning programs and information alone may not reduce birth rates in developing countries to levels sought and that reduction in average family size may be achieved faster when these services are provided in association with development programs and projects.

Accordingly, the Agency's population policy has been revised to place greater importance on social and economic change to influence birth rates. The Agency characterized this "future directions" policy, announced in July 1976, as a substantial change in emphasis. GAO applauds this policy change. (See pp. 37 to 39.)

Recognizing the importance of relating population to development assistance as recommended by the Agency, the Congress, in 1977, added section 104(d) to the Foreign Assistance Act of 1961, as amended. The section requires identification of the potential impact of development assistance projects on population growth and requires that appropriate development projects be designed to build motivation for smaller families. (See p. 40.)

The Agency's new policy and the provisions of section 104(d) have yet to be implemented. GAO identified potential impediments or constraints to doing so.

Historically, the Agency's Office of Population has overseen and controlled or strongly influenced the Agency's personnel with population expertise and the use of appropriated population program funds; there has been no entity dedicated to integrating population and development assistance. A variety of views exist within the Agency regarding changes necessary to implement section 104(d). Organizational and financial arrangements have not yet been defined sufficiently, although they were under consideration as a part of an Agency reorganization effort in process at the conclusion of GAO's review. (See pp. 77 to 83.)

GAO does not advocate the reduction or discontinuance of the Agency's family planning activities. However, it is time to integrate development and family planning assistance. Such action can only increase the Agency's ability to help slow population growth.

The Agency Administrator must resolve organizational and financial issues in a manner that will insure the availability of funds and expertise needed to obtain necessary information and plan development projects that will also encourage smaller families. (See pp. 84 to 89.)

GAO recommends that the Administrator establish an organizational structure under leadership that will emphasize integrating population and development assistance and developing knowledge needed to carry out such an approach. Development and use of mission-level expertise is essential for this purpose. (See pp. 89 to 90.)

Since U.S. population and development assistance funds are provided to a large number of international, private, and voluntary organizations, they also should be encouraged to

consider population and development assistance relationships and the need to plan programs and projects accordingly. This is particularly important in countries where the Agency does not have significant assistance programs. (See p. 89.)

The United States is involved in a multinational multibillion dollar long-range program to develop the region of Africa known as Sahel. GAO found that development planners were not giving adequate attention to population growth and makes a number of recommendations. (See pp. 69 and 70.)

Officials of the Department of State and Agency for International Development reviewed a draft of this report and basically agreed with its principal thrust and conclusions. The Agency's written comments are included as appendix VI.

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#### LIST OF ABBREVIATIONS

AID	Agency for International Development
CILSS	Permanent Interstate Committee for Drought Control in the Sahel
DAC	Development Assistance Committee
FAO	Food and Agriculture Organization
GAO	General Accounting Office
IPPF	International Planned Parenthood Federation
OECD	Organization for Economic Cooperation and Development
U.N.	United Nations
UNFPA	United Nations Fund for Population Activities

## CHAPTER 1

### INTRODUCTION

World population increased from 1.5 billion to about 4 billion in the first three-quarters of the 20th century. The world population could double in less than 40 years at the present overall growth rate of about 1.8 percent. Although many nations now recognize that high growth rates are impeding efforts to improve the quality of life in developing countries, the United States has been the primary supporter of efforts to slow growth rates.

### WORLD POPULATION GROWTH

For centuries high death rates countered high birth rates to keep the population growth rate fairly low. World population did not reach 1 billion until 1830. Since then population has grown at an increasing rate, reaching 2 billion in 1930 and 3 billion only 30 years later. This increased rate was due primarily to reductions in the death rate with no corresponding decline in fertility. Such conditions as malnutrition and disease which contributed to high death rates are being controlled through modern technology. Mortality rates, particularly among the young, are lower than ever, and life expectancy is longer. These improvements began earlier and have extended further in the developed nations. For example, the President of the World Bank Group has pointed out that in the period from 1750 to 1850, the average annual population growth of the developed and developing countries was quite similar (0.6 percent for the developed and 0.4 percent for the developing) but in the period from 1950 to 1975, the rates were 1.1 percent and 2.2 percent, respectively.

Governments throughout the world are becoming increasingly aware of the rapid rate of population growth and its impact on the quality of life in developing countries. The 1965-75 decade has been characterized as the period of world awakening to the problems posed by rapid population increases and as the time during which population-related activities came of age. Prospects for an early stabilization of world numbers, however, are dimmed because of "population momentum." The high proportion of younger people in developing countries is producing offspring at a faster rate than that at which older persons are dying, thus perpetuating an unbalanced age structure. To achieve a stable population level, replacement-level fertility must first be achieved.

The President of the World Bank Group has said that even when replacement-level fertility is reached in a country, it will take another 60 to 70 years to stabilize the population. He stressed that each decade achieving worldwide replacement-level fertility is delayed will raise the ultimate stabilized population by 15 percent. For example, if current fertility trends continue, the world might reach replacement-level fertility in 2020; this would result in a stable population of 11 billion some 70 years later. If replacement-level fertility can be reached in 2000, the ultimate population would be 8 billion, 3 billion less. About 90 percent of the increase over today's level would be in developing countries.

Many authorities believe that population momentum will cause the world population to continue to grow for decades and to double, regardless of efforts to contain it. The Agency for International Development's (AID's) Office of Population said that a total stabilized population of substantially less than 8 billion is possible if fertility falls at accelerated rates and that replacement-level fertility is not a lower barrier to fertility decline. It believes recent trends are encouraging.

#### CONSEQUENCES OF POPULATION GROWTH

Rapid population growth in developing countries seriously impedes the already difficult task of improving the lives of millions who live at or near subsistence levels. Population growth often:

- Places additional burdens on food production.
- Increases unemployment and migration to urban areas.
- Places additional demands on inadequate health and educational services.
- Encourages political and civil disorders.
- Accelerates the use of natural resources.
- Threatens the Earth's ability to support life.

Population increases can also necessitate increased food imports and related debt increases. In parts of the developing world, declining agricultural productivity due to widespread slash-and-burn farming, overgrazing, overcropping, excessive cutting of forests to provide firewood

and ground to cultivate, and the expansion of desert areas have also been attributed to population pressures. One recent report concluded that, unless there is some check on population growth, "there ultimately is no solution to the world food problem."

U.S. officials have stated that population growth is nullifying much of the investment in economic growth and social progress in less developed countries, including those assisted by the United States. Widespread evidence of the effects of rapid population growth on efforts to improve the quality of life was noted in the countries visited by GAO. For example, in Ghana, as early as 1969, the government stated that "Ghana is now producing more children than it can comfortably provide for \* \* \*." The high growth rate in that country, however, still continues at about 3 percent annually. In Pakistan, where population growth is one of the most serious problems facing the country, the high growth rate continues at about 3 percent annually even though efforts have been made since the 1950s to reduce it. (See ch. 3.)

#### U.S. LEGISLATIVE INITIATIVES

Over the years the Congress has expressed concern about the harmful impact of rapid population growth on developing countries and on the effectiveness of the U.S. foreign aid program.

The first legislative action in the field of population assistance was set forth in the Foreign Assistance Act of 1963. Section 105 stated that "Funds made available to carry out this section may be used to conduct research into the problems of population growth."

Significant specific legislative actions since that time included the addition in November 1967 of title X to the Foreign Assistance Act of 1961, as amended. Section 291(a) of the title states:

"It is the sense of the Congress that, while every nation is and should be free to determine its own policies and procedures with respect to problems of population growth and family planning within its own boundaries, nevertheless, voluntary family planning programs to provide individual couples with the knowledge and medical facilities to plan their family size in accordance with their own moral convictions and the latest medical information,

can make a substantial contribution to improve health, family stability, greater individual opportunity, economic development, a sufficiency of food, and a higher standard of living."

Title X provides for a range of programs on population growth.

"[It] includes but is not limited to demographic studies, medical, psychological, and sociological research and voluntary family planning programs, including personnel training, the constructing and staffing of clinics and rural health centers, specialized training of doctors and paramedical personnel, the manufacture of medical supplies, and the dissemination of family planning information, and provision of medical assistance and supplies."

In fiscal year 1968, the Congress began earmarking development funds for population assistance. Earmarking funds for title X meant that the funds were to be used only for population assistance. If funds were not used for the population program, they did not become available for other purposes.

It was the Congress' desire that the administration more aggressively pursue population problems and give high priority to family planning activities in its foreign assistance programs. The Congress earmarked \$35 million of fiscal year 1968 foreign assistance funds for title X programs. This amount rose to \$50 million for 1969, \$75 million for 1970, and \$100 million for 1971.

The Foreign Assistance and Related Programs Appropriations Act of 1972 specifically appropriated \$125 million for title X activities. For fiscal year 1973, the amount provided was also \$125 million. For fiscal year 1974, the Congress combined the appropriation for population and health and specified that not more than \$112.5 million of the amount appropriated would be available for title X programs. The amount specified for population programs was not more than \$110 million for 1975, not less than \$103 million for 1976 (plus an unspecified portion of \$33.45 million for the transition quarter), and not less than \$143.4 million for 1977.

Another legislative action--section 114 of the Foreign Assistance Act of 1961, as amended in 1973--restricted the use of funds for abortions, as follows:

"Section 114. Limiting use of funds for abortion--None of the funds made available to carry out this part (Part I of the Act) shall be used to pay for the performance of abortions as a method of family planning or to motivate or coerce any person to practice abortions."

In the years since 1963, when the Congress took its first legislative action in the population field, several legislative themes have become evident:

- Assistance is to be given in response to specific requests from less-developed countries, and the aid is meant to supplement a country's own efforts.
- Assistance is to be given to those programs in which individual participation is voluntary.
- No particular population policies are to be imposed upon foreign countries. Planning should be the responsibility of each country, and U.S. assistance should support the goals chosen by each nation receiving assistance.
- Assistance may be made available through grants or loans, or both, including dollars for the purchase of commodities in the United States and local currency grants or loans.
- Emphasis is placed on assisting the work of international and private organizations.
- Economic assistance should focus on critical problems which affect the lives of the majority of the people in the developing countries; one such critical problem is population planning.

The Foreign Assistance Act, as amended in 1973, directed AID to undertake far-reaching reforms in U.S. bilateral assistance programs. The act gave priority to helping the impoverished majority to improve its standard of living and participate more effectively in the development process. It focused foreign assistance on the functional areas of (1) food and nutrition, (2) population planning and health, and (3) education and human resources development.

The International Development and Food Assistance Act of 1975 added the following new subsection to section 104 of the Foreign Assistance Act of 1961, as amended.

"(b) Assistance provided under this section shall be used primarily for extension of low-cost, integrated delivery systems to provide health and family planning services, especially to rural areas and to the poorest economic sectors, using paramedical and auxiliary medical personnel, clinics and health posts, commercial distribution systems, and other modes of community outreach; health programs which emphasize disease prevention, environmental sanitation, and health education; and population planning programs which include education in responsible parenthood and motivational programs, as well as delivery of family planning services and which are coordinated with programs aimed at reducing the infant mortality rate, providing better nutrition to pregnant women and infants, and raising the standard of living of the poor."

Still another subsection was added to section 104 by the International Development and Food Assistance Act of 1977.

"(d)(1) Assistance under this chapter shall be administered so as to give particular attention to the interrelationship between (A) population growth, and (B) development and overall improvement in living standards in developing countries, and to the impact of all programs, projects, and activities on population growth. All appropriate activities proposed for financing under this chapter shall be designed to build motivation for smaller families in programs such as education in and out of school, nutrition, disease control, maternal and child health services, agricultural production, rural development, and assistance to the urban poor.

"(2) The President is authorized to study the complex factors affecting population growth in developing countries and to identify factors which might motivate people to plan family size or space their children."

The circumstances that led to the enactment of section 104(d), which was effective October 1, 1977, are discussed in chapter 5.

AID has stated that limiting population expansion is critical to improving the quality of life in developing countries, and it views efforts to contain population growth as a part of its congressional mandate.

#### U.S. EXECUTIVE BRANCH INITIATIVES

Over the years an AID population assistance organizational structure has evolved in response to expanding funding and the increasing congressional concern about the population problem. In 1966 AID created a Population Branch in the Health Service of its Office of Technical Cooperation and Research. A Population Service was also created in AID's Office of the War on Hunger, established in 1967, to provide technical guidance and leadership for AID's population work. At that time population staffing was begun by AID's regional bureaus in Washington and in AID missions and U.S. posts abroad. AID's present population office was established in 1969. In 1972 it became the Office of Population Assistance and enfolded the geographic population sections formerly within the regional bureaus. In the fall of 1977, the Office was placed in the new Development Support Bureau. <sup>1/</sup> (See pp. 77 and 78.)

During 1970 and 1971, six major categories or goal areas of population program activities were devised: (1) improvement of demographic data, (2) population policy development, (3) biomedical research to improve family planning methods and operations research to make delivery of family planning services more effective, (4) support for delivering family planning services, including provision of contraceptives, (5) support for information and education activities, and (6) support for training and institutional development. AID's Office of Population is essentially organized around these six areas, with a headquarters technical division responsible for each area. <sup>1/</sup> Activities in the technical divisions can be in support of either country and regional projects or centrally funded programs. The headquarters divisions also collect, analyze, and coordinate information.

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<sup>1/</sup>In January 1978, we were told that bilateral program management responsibilities would be transferred to the regional bureaus and the Office of Population would retain an operations coordination staff to facilitate the interface of centrally managed and bilateral activities.

The Office of Population also includes four geographic divisions--the Africa Division, Asia Division, Near East Division, and the Latin America Division. The geographic divisions, with expertise in their respective areas of responsibility, act as liaison between the field missions, the geographic and technical bureaus, and other organizations engaged in population activities. (See footnote 1, page 7.)

AID's population activities are carried out in a variety of ways--through project agreements with host countries; contracts and grants with private voluntary organizations, universities, and international organizations; and arrangements with other U.S. Government agencies. Also within the Department of State, the Coordinator of Population Affairs assists in the review and coordination of the foreign policy aspects of U.S. international population programs and promotes and encourages greater involvement in population matters, particularly at the ambassadorial level.

Our November 9, 1976, report "Challenge of World Population Explosion: To Slow Growth Rates While Improving Quality of Life" (B-156518), provides more detailed information on the world population situation, how it is viewed, and what is being done about it. It addressed (1) population issues on a worldwide basis, (2) interrelationships between population growth and economic and social development, (3) governmental and other opinions on population growth as a hindrance to development, and (4) population-related activities including those funded by AID.

#### SCOPE OF REVIEW

This report reviews AID's population assistance activities and its efforts to lower rapid population growth rates in selected developing countries. It assesses the need to integrate population and development assistance, and the obstacles to doing so.

In this report we built on our three previous reports on the population situation from a worldwide perspective, in Ghana, 1/ and in Pakistan. 2/ We visited the Philippines, Indonesia, Sri Lanka, El Salvador, and Colombia. We also examined the extent to which population growth considerations

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1/"Impact of Population Assistance to an African Country " ID-77-3, June 23, 1977.

2/"Impact of Population Assistance to an Asian Country," ID-77-10, July 12, 1977.

were part of the Sahel development program and, in this connection, visited Mali, Senegal, and Upper Volta and talked with concerned officials in Paris, France, and Washington, D.C. 1/

Generally, we talked with U.S. Ambassadors, AID mission directors, and other U.S. officials as well as representatives of active international organizations in the countries visited. In most countries, we also met with officials of international and private organizations, with family planning related organizations, and with host government officials.

Data in most developing countries are limited and subject to inaccuracies. Some of the data included in this report are derived from estimates of various researchers, and there were often conflicts between sources. In many cases we used what we considered to be the most accurate information, or an average of the conflicting data. We believe the data were adequate for the purposes of this review.

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1/Another GAO report, "The Sahel Development Program-- Progress and Constraints" (ID-78-18), addresses the over-all program.

## CHAPTER 2

### MAKING FAMILY PLANNING SERVICES AVAILABLE--

#### APPROACH USED IN FIRST 10 YEARS OF

#### U.S. ASSISTANCE PROGRAM

The Director of AID's Office of Population, coauthoring a 1976 article, noted:

"As it became increasingly evident that the principal key to rapid fertility reduction in developing countries was the extent of availability of the most effective means of fertility control \* \* \*, the office \* \* \* undertook a set of initiatives aimed at exploiting this principle to improve the effectiveness and efficiency of family planning programs."

The authors also noted that they became "increasingly convinced that availability was ordinarily the dominant determinant of contraceptive utilization." This belief has molded U.S. population assistance to date.

Over half of the U.S. assistance to help developing countries slow population growth rates has been for centrally funded projects planned and managed by AID offices in Washington, primarily the Office of Population. Regional and country projects, largely developed and administered by AID field missions, with support from Washington, have received more than \$300 million.

AID, through its Office of Population, has given primary emphasis to making effective contraceptives available and to supporting family planning programs in developing countries. Its family planning and biomedical and operational research projects, which have received the bulk of the population funds, directly support this emphasis; to varying degrees, many of its other projects have been keyed to support of the family planning services approach to lowering fertility.

#### CATEGORIES OF AID POPULATION ASSISTANCE

Population assistance can be categorized in several ways. The following table shows assistance as nonregional (centrally

funded), country, and geographic region, from fiscal year 1965 through 1976 and the transition quarter. <sup>1/</sup> (See apps. I, II, and III for details of financial data.)

<u>Category</u>	<u>Amount</u>	
	(millions)	
Nonregional assistance:		
Office of Population	\$401.5	
Other AID Washington entities	9.3	
AID operating expenses	34.0	
United Nations Fund for Population Activities	<u>117.0</u>	561.8
Country assistance		232.1
Geographic region assistance		<u>73.9</u>
 Total		 <u>\$867.8</u>

As the schedule shows, over \$400 million of the population funds has been under the direct control of the Office of Population. AID's field missions generally have not been deeply involved in the planning of these centrally funded projects. Country and regional projects are undertaken and administered by field missions and regions, with the advice, consent, and assistance of the Office of Population. A relatively small portion of nonregional population projects is handled by other Agency offices. For example, its Office of Health.

#### Six goal areas for population assistance

As discussed in chapter 1, AID's population work is essentially focused on six goal areas. Through September 1976 it had categorized obligations for population assistance according to goal area, as follows. Centrally funded, country, and regional programs are included. (Through fiscal year 1975, operating costs were listed separately.)

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<sup>1/</sup>The category breakout of the fiscal year 1977 appropriation of \$143.4 million was not yet available.

<u>Goal</u>	<u>Total</u>	<u>Percent of total</u>
	(millions)	
I Demographic	\$ 75.9	9
II Policy	42.6	5
III Research	76.8	9
IV Family planning services	408.8	47
V Information	96.5	11
VI Training and institutional development	134.0	15
Operating expenses	<u>34.0</u>	<u>4</u>
Total	<u>\$867.8</u>	<u>100</u>

Over half of AID's population assistance was obligated for family planning services. About \$150 million of this sum was for contraceptives. In addition, most projects in the biomedical/operational research and the information, education, and communications goal areas are closely linked to the direct family planning approach to population growth reduction programs. Some projects in the manpower and institutional development goal area, particularly those providing medical training, are also closely linked. Generally speaking, demographic and policy goal area projects are more often involved in a broader approach to the population question. Family planning services and related projects have thus received project funds in three goal areas, and some of those in the training area are directly related to providing family planning services. Family planning service related projects could have received three-quarters of all AID population funds, or more.

AID officials feel that progress has been made in lowering fertility but that the bulk of the task lies ahead. The Director of the Office of Population has said that population assistance should extend through 1985 with the funding level increased to as much as \$250 million a year. He said overall U.S. population assistance for the 1965-85 period "should be less than \$3 billion." Through September 1976, about \$868 million had been obligated. The fiscal year 1977 appropriation brought the total to over a billion dollars. The Director believes the approach taken by his Office over the past decade has been the most effective and should be continued.

Delivery of family planning services emphasized by Office of Population

We worked with Office of Population officials to categorize centrally funded projects by goal area and found that these projects have also been concentrated in family planning services delivery. The following schedule shows the allocation of funds through fiscal year 1976, excluding the transition quarter.

<u>Goal</u>	<u>Total</u>	Percent of total ( <u>note a</u> )
	(millions)	
I Demographic	\$ 32.9	9
II Policy	21.0	6
III Research	50.2	13
IV Family Planning Services	215.5	57
V Information	24.0	7
VI Training and Institutional Development	<u>36.6</u>	<u>10</u>
Total	<u>\$380.2</u>	<u>100</u>

a/Figures do not add due to rounding.

As this table shows, over 50 percent of Office of Population managed funds have been obligated for family planning services and contraceptive supplies (goal IV). Additional funds have supported projects in closely related goal areas. From the beginning of its population assistance, AID has emphasized the development and strengthening of family planning services. The intent is to (1) provide and encourage adequate availability of contraceptives and program services and promote the development of improved delivery systems for family planning supplies and services and (2) provide technical consultation on program problems. According to AID, such services, available at the request of host countries, are essential to the growth and expansion of family planning programs.

FAMILY PLANNING SERVICES DIVISION AND OTHER OFFICE OF POPULATION DIVISIONS

The Family Planning Services Division arranges delivery of contraceptives and other medical equipment with the concurrence of the AID mission in individual countries, provides technical consultation to help resolve special problems arising in the development of country programs, and monitors

grants to private organizations involved in population programs. AID's strategy in providing family planning services is focused directly on the delivery of contraceptives and on reaching that part of the population in greatest need of family planning services.

#### Other technical divisions

The Demographic and Economic Analysis Division's goal is to generate and analyze demographic data to (1) measure the impact of AID-supported family planning programs, (2) give officials of developing countries an understanding of population problems, and (3) assist family planning administrators in program design and implementation.

The Population Policy Development Division's basic goal is to persuade governments to adopt and implement population policies. Efforts are made to analyze and demonstrate (1) the consequences of rapid population growth, (2) the social and economic influences on fertility, and (3) the effects of laws on population growth.

The Research Division supports a broad range of biomedical and operational research to develop new information and improved methods of contraception and to disseminate information.

The Information, Education, and Communication Division supports projects helping developing countries evolve or improve their population information delivery systems.

Finally, the Manpower and Institutions Division works (1) to assist priority developing countries in training competent family planning personnel and (2) to increase the self-sufficiency of developing country training, research, and data collection.

### CHAPTER 3

#### IMPACT OF FAMILY PLANNING PROGRAMS

##### IN SELECTED COUNTRIES

It is difficult to assess the impact of AID's family planning assistance, started on a large scale in the late 1960s. Authorities believe the world population growth rate is down from the peak rate estimated at about 2 percent in the early 1970s. AID has stated that birth rates probably began falling in the late 1960s but did not fall as rapidly as death rates until the 1970s. The factors underlying the decline, however, are not clear.

There are growing indicators that progress has been made in solving the world's population problems. More and more governments have removed barriers to family planning and are instituting family planning programs; the number of developing countries with family planning programs has increased dramatically--from less than 20 to more than 50 since the United States entered the population assistance field in 1965. AID has stated that its expenditures have encouraged some 50 other governments to contribute funds toward solving world population problems and that birth control technology has improved rapidly during the past several years.

However, it is important that growth rates fall faster in order to achieve a lower ultimate stabilized population. If current fertility trends continue, world population might stabilize at about 11 billion in 2090 according to the World Bank. Even in today's world of 4 billion people, many are malnourished and lack education, adequate housing, and health care. Excessive population growth compounds the difficulty of improving the quality of life of these people. (App. IV provides basic socioeconomic data on the developing countries we visited.)

It is generally recognized that much work remains to be done. According to the Office of Population, effective family planning services are still available to less than half of the developing world population (excluding the People's Republic of China).

Despite the increasing availability of family planning services, many authorities question the possibility of achieving population stability by the provision of these services

alone. Furthermore, the extent to which family planning services contributed to the observed fertility declines is generally unknown, although Office of Population officials believe it to be significant.

### LEVELS OF FAMILY PLANNING ACCEPTANCE

According to AID's 1976 population analysis paper (see pp. 37 to 39), experts believe that to achieve population stability 60 to 70 percent of reproductive-age women would have to use contraceptives. We did not, however, find contraceptive use approaching this magnitude in any developing country. Our findings are discussed under the geographic captions beginning on page 19. Estimated prevalence of contraceptive use ranged from not more than 5 percent in Ghana to about 40 percent in Colombia.

Publications of the Population Reference Bureau, Inc., and the Population Council included the most comprehensive information we found on contraceptive prevalence (the percentage of married women of reproductive age using contraceptives--usually the 15 to 44 age group). An August 1977 Bureau document, however, pointed out that the data has several limitations and that surprisingly little information is available on contraceptive practice over time. The following table shows the contraceptive prevalence data available by year as compiled by the Bureau from a review of recent literature. Two exceptions are the prevalence figure for Sri Lanka and the latter figure for Pakistan which were obtained during field work. (Birth rates, growth rates, and other demographic data are shown in app. IV.)

<u>Country</u>	<u>Prevalence</u> <u>(year)</u>
Ghana	2(76)
Indonesia	19(77)
Pakistan	4(68), 5(76)
Philippines	8(72), 22(76)
Sri Lanka	20
Thailand	10(71), 32(76)
Colombia	31(74)
El Salvador	10(76)

On November 29, 1977, the Office of Population provided data showing higher recent prevalence rates for the Philippines (32) and El Salvador (14). It believes prevalence in Colombia is probably not less than 40 percent now based on a reported prevalence rate of 44 percent that excludes

pregnant and infertile women. In addition, it believes the rate to be 37 percent in Thailand. This percentage, however, excludes pregnant women. The Office also believes that the rate for Ghana is higher than 2 percent but not more than 5 percent.

Officials in the Office of Population have stated that higher prevalence rates exist in certain countries, such as Taiwan and Singapore, that were not included in this review. In this connection, on January 25, 1978, they provided prevalence rates based on recent surveys for several additional countries. We have not included the rates, as we have not examined the related circumstances in the countries. We noted, however, that the higher rates generally pertain to the more developed of the developing countries--Taiwan, for example. Furthermore, the rates may not be comparable to the rates in the above table as they excluded pregnant women. Also, we became aware of serious questions as to the validity of the survey procedures and results in one of the countries.

The Population Reference Bureau noted that while there is a contraceptive prevalence of about two-thirds in developed countries, in 29 developing countries, only 9 have a prevalence rate exceeding one-third. We believe this indicates the complementary roles of population and development assistance and the need to interrelate them for maximum fertility impact.

In this regard, AID's 1976 population analysis paper states that family planning services and information alone in developing countries may not suffice to bring birth rates down to target levels, much less to stable population levels. (See ch. 5.) The document points out that, as emphasized at the World Population Conference in 1974 and elsewhere, for socioeconomic reasons many parents want three, four, or more children at a minimum, even when safe, effective, and affordable family planning services are available. In Pakistan, we noted that not only is a limited number of reproductive-age women accepting family planning, but that the women accepting family planning are those who already have three or four children. (See pp. 37 to 39.)

The phenomenon in which acceptance of family planning rises to a certain point then levels off has been referred to as "plateauing." An AID population official in the Philippines had developed charts showing what he believed to be achievable plateaus of contraceptive use under several conditions. His chart indicated a prevalence range of from 30 percent to 50 percent, with a full coverage delivery system. Such a system would include universal access to quality

services, commercial and nonclinical distribution, integration with maternal-child health, good administration, and other ideal conditions. He also believed that to achieve prevalence of contraceptive usage high enough for population stability, additional measures that would include linking family planning programs to other development efforts would be necessary. His chart also indicated that the greatest contraceptive prevalence occurs within the development and modernization context.

The Population Council has also addressed the relationship between family planning programs and development programs and the limits on family planning programs in the absence of an improving social and economic situation. A January 1976 Council publication stated:

"It is likely that there is an upper limit to the improvement in results in the absence of significant social and economic changes that would increase both motivation for family planning and the capacity of the country to implement an effective program."

\* \* \* \* \*

"Let us make it clear again that we are convinced that the wider the range of development progress, the more likely the decline in fertility with or without a program."

According to AID, leaders in developing countries increasingly recognize that the reduction of population growth rates involves not only the availability of family planning services but also the overall improvement of economic and social conditions, where the benefits of development are visible to and flow more directly to the poor, and where people can hope for a better future. The 1976 AID policy analysis (see ch. 5) stated that historical evidence also suggests that reduction in average family size sufficient for population stability can be achieved faster when family planning services and information are combined with appropriate development policies and programs. We found, however, that little effort has been made by AID to influence population through development. (See ch. 9.)

The status of population family planning programs for the countries in the three geographic areas where we did fieldwork are described in the following pages. Summary information on national socioeconomic indicators for the individual countries included in this review is provided in appendix IV.

## African countries

### Ghana

Ghana, with a population of about 10 million, has recognized that its population growth rate, estimated at about 2.7 percent annually, is impeding efforts to improve the quality of life. However, in 1976, according to a Population Reference Bureau document, only about 2 percent of reproductive age women were shown to be family planning acceptors. (An AID Office of Population official believes the rate to be higher but not more than 5 percent.) The government announced a strong population policy in 1969, and in 1970 established the Ghana National Family Planning Program. The policy noted that "Ghana is now producing more children than it can comfortably provide for \* \* \* " and that "unless birth rates can be brought down to parallel death rates \* \* \* children of the next few generations will be born into a world where their very numbers may condemn them to life-long poverty." The policy called for a broad program, including efforts to lower mortality, expand female employment, encourage family spacing or limiting, and provide information and supplies.

Family planning services are available at some government clinics and at clinics run by private organizations, including the International Planned Parenthood Federation (IPPF) affiliate, the Planned Parenthood Association of Ghana. Our detailed observations and recommendations to AID on Ghana's population situation and the effectiveness of projects to lower the growth rate were initially presented in the report, "Impact of Population Assistance to an African Country" (ID-77-3), June 23, 1977.

In the report we noted several program operational difficulties. For example, there were only about 140 active clinics, 75 percent of which were in urban areas where only 30 percent of the population lives. At some of these clinics, family planning was available only a few hours a week; and commercial distribution of contraceptives was limited.

It is believed by Danfa project and AID officials in Ghana, however, that before the majority of the population limits family size, there must be socioeconomic changes in addition to availability of family planning services. (See pp. 34 and 35.) Such factors as government constraints, coordination problems, and lack of knowledge inhibit effective integration of population projects with other development

projects. AID has recognized that the present governmental program is not successfully integrating efforts to restrain growth with other development programs. AID hopes that impediments to doing so will be overcome and continues to support programs in Ghana, including the National Family Planning Program with its clinic-dominated approach and the Danfa project. AID is also beginning a project for the commercial distribution of contraceptives.

### Sahel

The Sahelian countries of Africa--Chad, Mali, Mauritania, Niger, Senegal, and Upper-Volta--are among the world's least developed, least industrialized, and poorest nations. Education is available to only a small percentage of school age children, and health services are inadequate. Assurance of adequate food supplies is a major problem. Family planning programs in the Sahelian region have been nonexistent or extremely limited. The population grew from 20.7 million people in 1965 to about 27 million in 1976. The 1976 growth rate was estimated at about 2.4 percent; extraordinarily high birth rates have been countered, to some extent, by death rates that are among the world's highest. Religious, traditional, and socioeconomic factors encourage large families. Higher growth rates are expected as development efforts lower death rates.

Nevertheless, Sahelian governments have not identified population growth as a major obstacle to development and have not initiated family planning programs or programs designed to lower desired family size. Some countries have indicated larger populations would be in the national interest. In only two countries--Senegal and Mali--are there any family planning (child spacing) clinics; these are very limited in number and exist only in the capitals. Chapter 8 discusses population growth in relation to the Sahel development program.

### Asian countries

#### Indonesia

In Indonesia, the world's fifth most populous country with about 132 million people, the Government appears to support fully the family planning program. The population growth rate is 2.4 percent according to the Population Reference Bureau's 1977 World Population Data Sheet.

Organized nongovernment family planning activities in Indonesia started in the 1950s. In 1967 a new Government declared that family planning was acceptable, and in 1970 the basis for the current official program was established. The family planning program is administered by a nondepartment governmental institution responsible directly to the President. The program, initiated on the islands of Java and Bali, is being extended.

The Government's program budget for family planning related activities rose from \$75,000 in 1969 to \$12.5 million in 1975. The total during the period was \$36 million. External family planning assistance amounted to \$48 million of which AID provided about \$23 million in direct assistance.

The Government's 5-year plan (1974-79) provides for the expanded availability of contraceptives and accelerated implementation of various incentives to lower fertility. The plan calls for reaching 9 million new acceptors during the period; about 40 percent were reached in the first 2 years. The overall population program objective is to halve the present approximate birth rate of about 38 per 1,000 people by the year 2000. AID mission officials stated that it will be necessary for about 58 percent of all married women of reproductive age to use contraceptives if the goal is to be reached. The number of these women using contraceptives in 1977 was estimated to be 19 percent. In January 1978, an Office of Population official stated that the rate for fertile, nonpregnant women was 28 percent in Java and Bali and as high as 39 percent within these areas where the program was particularly intense.

AID officials believe that there has been no major economic change in Indonesia. They attribute the indicated decline in the fertility rate to the provision of family planning services within the framework of (1) a supportive organization, (2) strong government leadership, and (3) social changes, such as the changing role of women. Documents provided by AID, however, point out that formidable tasks are still ahead since the "ideal" family remains above four children.

### Pakistan

Family planning efforts were first started in Pakistan by a private voluntary organization in 1953. The Government of Pakistan initially supported family planning in its first 5-year plan (1955-60). Since that time about \$164 million, including about \$59 million provided by the United States, has been devoted to lowering the fertility rate.

In July 1973 the Government restructured the program. Major features of the new approach, generally referred to as the expanded population planning program, included a system of continuous motivation and a contraceptive inundation effort. The inundation element of the program, incorporated in fiscal year 1974 and financed by AID, had the objective of making contraceptives more widely available than ever before at prices even the poorest could afford.

Growth rate reduction objectives, however, have not been met. Pakistan, with a population of about 73 million, still has a growth rate of about 2.9 percent which is one of the country's most serious problems. Only about 5 percent of the married nonpregnant women are believed to be using some contraceptive method or to have been sterilized--about the same percentage as was reported in 1969. An AID contract evaluation team recently reported that the family planning program is not working. The social, economic, and cultural norms of a largely subsistence-level society and the lack of adequate commitment and support by the Government appear to be the primary causes of program difficulties.

In our report on the program <sup>1/</sup> we stated that the unimpressive results of the expanded program, particularly the inundation effort, were attributable in part to AID's encouraging and entering into the program (1) without adequate assurances of Pakistan Government willingness and capability to carry out the program and (2) with little attention to the circumstances that would be necessary for potential parents to desire smaller families and use family planning services.

We recommended in our report that the Administrator of AID reassess the advisability of continuing family planning assistance to developing countries (1) which do not have a management system and an information system in existence (or actively under development) sufficient to provide reasonable assurance that program objectives are being met or (2) whose Government and institutions have not demonstrated a willingness and capability to carry out the program.

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<sup>1/</sup>"Impact of Population Assistance to an Asian Country" (ID-77-10), July 12, 1977.

## Philippines

Population growth is a major obstacle to improving the quality of life in the Philippines. In 1975 the Philippine population was estimated to be nearly 43 million. Its growth rate is about 2.7 percent. At this rate, the population would double shortly after the year 2000, placing enormous strains on economic development.

The Philippine Government recognizes the seriousness of the population problem and has shifted from a pronatal policy to an increasingly comprehensive, noncoercive family planning program. Through fiscal year 1975, \$59 million was provided for public and private population efforts, of which \$14.3 million was provided by the Government and \$36 million by AID.

Under the Philippine population program, the number of clinics offering family planning services increased from 10 in 1970 to about 2,600 in 1976. The population growth rate, however, continues at a high level. The number of new participants in the clinic-based family planning program has reached a plateau in recent years, but the program is being expanded into a full coverage system to reach the rural majority. On August 30, 1977, the AID Administrator approved a population planning project paper for a grant of \$13.5 million to be devoted to achieving low-cost, country-wide rural and urban distribution of family planning services over a 4-year period.

While the Philippine Government believes that full coverage will help reduce the growth rate to about 2.1 percent by 1980, the AID mission views this goal as "ambitious" and estimates that it may reduce the growth rate to only about 2.5 percent by then and to 2 percent by the year 2000.

The Philippine Government estimated about 20 percent of married women of reproductive age were using contraceptives in 1975, up from only 1 percent in 1970. The prevalence rate was about 22 percent in 1976, according to the Population Reference Bureau. According to AID, another source shows a rate of 32 percent for 1977. The Government hopes that full coverage will increase the continuous user rate to about 35 percent. It appears that the number of desired children, however, remains high. According to the mission, a three-child family average may be attainable by 1990 if full coverage is supplemented by efforts

to achieve greater social support for lowered fertility. (See also pp. 74 and 75.)

### Sri Lanka

Sri Lanka (Ceylon), with a population of about 14 million in 1976, has experienced a major decline in its population growth rate. The rate decreased from about 2.8 percent in 1953 to the current estimate of about 2 percent. At this rate, the population would double in 35 years. The current contraceptive prevalence rate is estimated to be about 20 percent.

The Family Planning Association of Sri Lanka, now an affiliate of the IPPF, was founded in 1953. The government-supported program started in 1965, but it was not until 1973 that contraceptives became readily available. AID does not directly support the effort due to sensitivities surrounding the issue, although organizations the United States supports, such as the United Nations Fund for Population Activities (UNFPA) and IPPF (through its affiliate), do supply funding.

It is believed that socioeconomic improvements have played a significant role in reducing Sri Lanka's birth rate. A Cornell University staff paper concluded that, while the family planning program has achieved some success, it has not been sufficient to account for much of the fertility decline noted. It stressed that the program's success indicated that basic social and economic preconditions to a reduction in fertility were being met.

Following World War II, Sri Lanka initiated a number of social welfare programs that, reportedly, have contributed to lowered fertility, albeit unintentionally. These include food and transportation subsidies, free education and health services, land reform, and fiscal policies (tax restructure). These programs are thought to have indirectly reduced fertility by affecting some of the more important socioeconomic determinants of fertility--income, status of women, age at marriage, and infant mortality. The average marriage age has increased, and the economic utility of children has decreased. Government social welfare programs appear to have created a positive environment for fewer births. Under these conditions, the worsening economic situation and high unemployment is believed to have motivated couples to postpone marriage and to have fewer children. The nature and extent of the linkage between all these forces and fertility behavior, however, is not yet known. (See pp. 43 and 44.)

The Government of Sri Lanka has recognized the problems facing the nation and has called for renewed emphasis on family planning services and for wider coverage for these services.

### Thailand

The population of Thailand is estimated to have more than doubled between the end of World War II and 1976--from 17.6 million to 44.4 million. The annual growth rate is about 2.4 percent. To cope with the problem, the Royal Thai Government initiated a formal population policy in 1970, although some efforts were previously underway. The program has concentrated on the delivery of family planning services, primarily through health facilities. According to one 1975 report, the effort has achieved a rate of family planning acceptance that is exceeded by only four or five developing countries. Because Thai culture seems unusually receptive to family planning, it is believed that for the next few years more new acceptors can be recruited by extending the delivery system. Contraceptive prevalence is about 32 percent.

In a May 10, 1977, report, "AID Population and Family Planning Program in Thailand," the Department of State Inspector General of Foreign Assistance stated:

"We found that AID's grant assistance has played an important role in the development and operation of the successful RTG [Royal Thai Government] program that has reduced the population growth from 3.1 percent in 1970 to 2.2 percent at the end of 1976. The RTG has an effective organization to manage the population program, an excellent training program, and the capability of assuming the responsibility for funding the program at the end of FY 1978. The RTG plans to extend family planning services to remote rural areas with the objective of reducing the population growth rate to 2.1 percent or lower in 1981. Present estimates indicate that a growth rate of 2.1 percent will be achieved in a year or two, well ahead of schedule."

The Thai Government's financing of the program rose from \$486,000 in 1969 to \$2.7 million in 1975, with a total for the period of \$11.2 million. External assistance for the period 1967 through 1975 amounted to about \$15 million, about \$11 million of which was provided by AID.

## Latin American countries

### Colombia

Colombia's population growth is still a serious problem even though the growth rate has been reduced from over 3 percent in the mid-1960s to about 2.5 percent, according to the Population Reference Bureau (2.2 percent according to other source data--see app. IV.). Population growth reduction programs have been considered highly successful. The contraceptive prevalence rate was estimated by the Population Reference Bureau to have been 31 percent in 1974. AID's Office of Population believes the current rate is probably not less than 40 percent. (See p. 16.)

The birth rate declined from 43.7 per thousand in 1965 to 33 per thousand in 1973. This rapid decline in fertility during a period of active family planning efforts and of social and economic change gave rise to consideration of the relative extent to which these conditions resulted in an increase in demand for and use of such services.

A committee, formed to assess this matter, used two mathematical models in its research. One model estimated that a minimum of 39 percent and a possible maximum of 62 percent of the decline in fertility from 1964 to 1975 was due to organized family planning programs. The other model gave a single estimate, attributing 44.1 percent of the decline to family planning programs.

We believe these results demonstrate the complementary roles of efforts to make family planning services available and to bring about social and economic change. In fact some development projects have taken the population issue in Colombia into consideration. For example, in a small farmer training program, volunteers trained as community level leaders are prepared to introduce responsible parenthood ideas as well as agricultural information to the rural poor.

The total population in 1970 was 21 million; by 1976 it had increased to 24.1 million. At a growth rate of 2.2 percent, population would double in 32 years. Financial assistance for population activities from 1967 to 1975 has amounted to about \$29.8 million, over \$9 million of which was provided by the Colombian Government and over \$3.1 million by AID.

Family planning programs in Colombia started in the mid-1960s. The medical profession took the lead by sponsoring seminars, research, and later providing family planning services. Family planning programs have been implemented primarily by three organizations. Total active users in the organized family planning programs have increased from 31,200 in 1967 to 853,200 in 1976.

### El Salvador

El Salvador, the smallest of the Central American republics, is the second most populous country in the geographic region. Its total population increased from about 3 million in 1966 to 4.2 million in 1975. In 1976 the contraceptive prevalence rate was about 10 percent, according to the Population Reference Bureau; according to AID the rate was about 14 percent.

The growth rate which has decreased since 1966 from 3.5 percent to a current estimated rate of 3.2 percent is having a negative effect on the country's economic and social development. At the current estimated rate, population would double in 22 years.

External foreign financial support to family planning in El Salvador totaled \$8.1 million between fiscal years 1966 and 1975, \$3.3 million of which was provided by AID. Some family planning services were provided as early as 1962. There is an active IPPF affiliate. In 1968 the Ministry of Health initiated a program to integrate family planning with the Mother/Child Health program. These early programs, however, did not significantly reduce the growth rate, and because of the continuing high growth rate the government initiated its Integral Population Policy in October 1974. The policy addresses areas such as nutrition, morbidity and mortality rates, employment, population distribution, and women in development. It appears to have improved the coordination among host government organizations, the AID mission, and private organizations.

A National Fertility Survey that was carried out in metropolitan, urban, and rural areas surveyed a total of 2,215 women of fertile age (15 to 49 years). Some of the results of this study follow:

--The number of women (15 to 49 years) that used contraceptives at the time of the survey (active users) was 14.2 percent. The percentage of active users was 29.2 percent in the metropolitan areas; 15.8 percent in the urban areas; and 9.1 percent in the rural areas. The most common methods of contraception used were surgical sterilization, pills, and intrauterine devices (IUDs). The survey showed that 71 percent of the women sterilized and 59 percent of those using the pill had obtained these services at the government clinics; whereas women using intrauterine devices had obtained them through other sources.

--Of the total active users, the largest amount (32 percent) was in the 30 to 34 year age group. Approximately one out of every five women in the 25 to 29 and 35 to 39 age groups were active users. The most widely used method by women up to 24 years of age was the pill, but sterilization was the most used method among women after they reached their 25th birthday

AID has participated in family planning efforts since 1966. Currently it has project agreements with three entities in El Salvador. These projects provide for a number of family planning activities including demographic data collection.

## CHAPTER 4

### NEED FOR EXPANDED APPROACH TO POPULATION GROWTH PROBLEMS RECOGNIZED

In recent years, elements of the foreign assistance community have become increasingly aware of the need to seek solutions to population growth problems within the broader context of social and economic change. In many countries, families view a large number of children as economically and socially beneficial, although population growth impedes national development. There is an increasing awareness that family planning technical advice and assistance alone may not resolve this dilemma and that there is a need for social and economic change that would make families want fewer children.

The United Nations designated 1974 as World Population Year and sponsored the World Population Conference in Bucharest, Romania, in August. It was the first such meeting of government representatives addressed to the relationship of basic demographic problems and economic and social development, and it brought together representatives of independent countries with varying perspectives. At the United Nations-sponsored International Women's Year Conference in 1975 the importance of making family planning services available and of advancing the status of women was discussed. At both conferences, a number of countries stressed that projects designed specifically to lower fertility should not be considered substitutes for social and economic development efforts.

#### INTERNATIONAL FORUMS

In a comprehensive report on the World Population Conference, the Population Council stated that development was in a sense the dominant theme and that issues related to it permeated all discussions.

The Council's report included a discussion of the activities of the conference committee charged with examining problems related to population change and socio-economic development. The committee reached a general consensus that population policies should be an integral part of, but never a substitute for, development policies. Three points stressed by a number of committee members were particularly noteworthy.

- Sufficient allowance should be made for relevant population variables in the formulation of development plans and policies.
- Development strategies should be shaped to accommodate both the built-in momentum of population growth and the long periods of time required to affect population trends.
- Special emphasis should be placed on promoting socioeconomic development among poorer populations which usually have higher birth rates.

Although the committee generally agreed that population growth and social and economic development are closely interrelated and that the main problem is underdevelopment, differing views arose during the debates. The Council placed these views and national positions in four categories.

One group of countries held that:

- Growing numbers of people can readily be accommodated.
- Rapid population growth is a positive force for economic and social development.
- The so-called population problems are actually problems of unequal distribution of world wealth and resources.
- Fertility will eventually decline, once there is true social and economic development.
- Population policies such as family planning are being urged upon poor countries to perpetuate inequality and to divert attention from the true issues of development.

Most East European countries attributed Third World population problems to international colonialism, neo-colonialism, and imperialism. They expressed the view that the Third World is being exploited by the capitalist, developed countries and that there is no need for population policies per se.

India, Egypt, Mexico, Yugoslavia, Italy, and some Latin American and African countries recognized that some countries do have population problems that hinder their social and economic growth. This group attributed the problems primarily to poverty, poor health, high mortality, and lack of education and concluded that the primary solution to rapid population growth problems is rapid social and economic development. It advocated a new international economic order.

A fourth group of countries--most of Asia, most of Western Europe, and the United States--held that serious social and economic problems in many countries continue despite strenuous efforts to develop and that while rapid population growth is not the cause of these continuing problems, it intensifies their effects. These countries believe that both rapid social and economic development and strenuous population policies and programs are required to bring population growth rates into balance with rates of economic and resource development. These approaches were seen as complementary to the furtherance of human welfare, with neither sufficient on its own.

The Honorable Imelda R. Marcos, a leader in the Philippines' efforts to slow its population growth rate, expressed the views of a number of developing nations in a 1976 address to the World Population Society. She stressed that those involved in population assistance must remember that "\* \* \* the central purpose and ultimate end of [their] efforts is the human being, his life and the improvement of that life" and that "\* \* \* the population problem \* \* \* has to do not only with the number of people but with the scarcity and maldistribution of resources."

The United Nations' International Women's Year Conference held in Mexico in June 1975, with its central themes of equality, development, and peace, was attended by representatives of about 135 countries. While advocating a woman's right to determine the number and spacing of her children, it was stated that results of mobilizing women fully into economic production would include increased output, more rapid economic growth, and smaller families.

Forums such as these and the body of research, experience (see ch. 3) and knowledge accumulated on family planning and development over the years indicate a need for a broader and more ambitious approach to the population problem than has traditionally been the case. In 1976, AID analyzed its own population assistance program and concluded new

directions were needed if population growth is to be slowed significantly. (See ch. 5.)

### POPULATION ASSISTANCE APPROACHES

Title X of the Foreign Assistance Act of 1961, as amended, after recognizing that " \* \* \* while every nation is and should be free to determine its own policies and procedures with respect to problems of population growth and family planning \* \* \*," continues by stating

" \* \* \* voluntary family planning programs to provide individual couples with the knowledge and medical facilities to plan their family size in accordance with their own moral convictions and the latest medical information, can make a substantial contribution to improve health, family stability, greater individual opportunity, economic development, a sufficiency of food, and a higher standard of living."

Thus, population assistance to date has been focused mainly on family planning medical and informational programs as described in chapter 2.

Traditionally, efforts have been made to reduce the population growth rate by the direct provision of family planning services as a discrete program and by the provision of family planning services in conjunction with other programs (a form of integration often referred to as piggy backing), principally health, nutrition, and related programs. AID's Office of Population is promoting integration of this nature where it is considered practical since use of available infrastructures frees more funds for direct family planning services. Most family planning programs are still clinic-based, although the Office of Population believes contraceptives must also be made available at the village and household levels.

The form of integration addressed in this report is through projects that result in social and economic change that reduce the desire for large numbers of children and consequently create a demand for family planning services. Little progress in this form of integration has been made to date, as shown in chapter 9. The following examples show the few, more innovative approaches to the population problem that we have noted in our recent population work.

#### Pakistan

The Government of Pakistan has noted the link between social and economic development and fertility and has

undertaken efforts to plan its development program to help reduce the birth rate. Its expanded population planning program provided for a wider development-oriented approach, recognizing that social and economic change could moderate or eliminate the desire for additional children and thereby create a demand for family planning services. A Demographic Policy and Action Research Center was established to explore national policy options that would encourage smaller families. AID has assisted these efforts in several ways. In 1975 AID-sponsored consultants of the Interdisciplinary Communications Program (a private organization associated with the Smithsonian Institution) analyzed preliminary staff papers to determine the probable demographic impact of the country's fifth development plan (1975-80). As a result of the analysis, the consultants made some recommendations concerning development and population for use by the government in the preparation of the plan.

In January 1976 the AID mission began requiring that all new development projects in Pakistan include a population impact statement assessing the effect of the project on fertility and mortality. It was hoped that the impact statement would increase the probability of modifying projects which were not sufficiently sensitive to demographic variables and make the AID mission staff more aware of the importance of considering demographic variables when planning new projects.

The AID mission has also supported the establishment of a population section in the Pakistan Institute of Development Economics. The function of the section is to (1) assess what an economically realistic population growth rate for Pakistan would be and (2) determine, on a continuing basis, the impact of various sector plans, programs, laws, regulations, and government policies on population growth rates. Beginning in fiscal year 1977, the mission also planned to support Pakistan's Demographic Policy and Action Research Center activities in the areas of action and experimental research, testing of innovations in family planning services delivery, communications, and motivational materials, and such other measures as incentives for the delay of births or sterilizations, sponsorship of research on the determinants of fertility, and population impact analysis.

### The Philippines

In July 1975 the Philippine Commission on Population, the governmental unit responsible for coordinating the

population program, started a program known as the Total Integrated Development Approach. The approach involves (1) the integration of population and family planning as an inseparable component of total socioeconomic development, (2) the active and continuing participation of the community in the planning and implementation of the program, (3) the supervision of the new administrative structure by the provincial, city, and municipal chief executives and (4) the provincial government's eventual assumption of total responsibility for the entire program.

The program is an attempt to involve the rural community not only as acceptors but also as planners and implementors of the population program. The idea is based on the belief that final responsibility for development, in its total sense, rests on the people in the community. When we were in the Philippines the program was being implemented in 7 provinces and was expected to be expanded to an additional 10 provinces.

The program had been underway for about a year at the time of our fieldwork. Reports on program results vary depending on their source, and the adequacy of supporting data was subject to question. We were told, however, that contraceptive use ranges from 35 to 50 percent in some of the communities where the approach is used.

### Ghana

In Ghana we found two AID-supported projects of special interest. The Danfa rural health and family planning project is testing in three distinct areas the relative effectiveness of family planning services delivered (1) in conjunction with health education and comprehensive health programs, (2) in conjunction with health education, (3) and by themselves. Acceptor rates range from 14 percent in the first case to only 3.3 percent in the last.

As a result of these findings, officials connected with the Danfa project have developed a spectrum of potential acceptors for the rural areas studied in that project. They believe about 10 percent of the women would accept family planning services without any motivational efforts. Some 25 percent more would accept family planning if it were provided with health care at a clinic. Another 15 percent would accept family planning if it were provided with health care in their village. However, they say that at the present time 50 percent would not accept family planning using any of the Danfa approaches.

Danfa and AID officials in Ghana believe a similar spectrum could be developed for other sections of Ghana, but note that the percentage of women in each category would change, depending on the area's rural or urban characteristics. Generally speaking, urban areas would have larger percentages of people in the first two categories, and rural areas more isolated than Danfa would have larger percentages of people in the latter two.

The Danfa research findings to date appear to indicate that many Ghanaians are more likely to accept family planning if it is provided together with health care. The findings appear to also indicate, as AID officials in Ghana believe, that before a large percentage of Ghanaians, particularly those living in rural areas, will accept family planning, their social patterns and economic status must change. AID Office of Population officials told us in January 1978 that they are much more cautious in interpreting the Danfa findings. They stated there were many deficiencies in the research design of this AID project.

AID is providing support to the Ghana Rural Reconstruction Movement project in the Mampong Valley. This project has as one premise that family planning should be an integral part of locally based social and economic development. The project's concept paper observes that the quality of human life is determined by population dynamics (changes over time) and economic and social development. The central hypothesis is that:

"The provision of community development action programs, such as education, health, roads, etc., will provide for the people the needed release from civic inertia to propel the community towards self-sustained development; and that such positive gains will be safeguarded through the adoption of population programs that reflect the increased need to reduce desired and completed family size, which in turn will generate increased demand for family planning services."

Officials connected with the Mampong Valley project emphasize that development and population matters are intertwined and must be treated together to improve the quality of human life.

From the time field operations began in the spring of 1974 to the time of our field work in 1976, project officials had contacted the 20 villages involved and had begun programs to improve agriculture and crafts, promote better nutrition

and hygiene, expand literacy, and demonstrate the need for and benefits of community cooperation. Once these programs were started, officials felt it was appropriate to introduce family planning education and services. This approach was viewed favorably by many people as a means of gaining acceptance of family planning.

## CHAPTER 5

### CURRENT AID POLICY FOR POPULATION- RELATED ASSISTANCE--FUTURE DIRECTIONS

AID has announced a future directions policy that aims to increase the effectiveness of its programs to help limit population growth in developing countries by examining and expanding the demand for family planning services. We noted, however, that little has actually been done by AID in Washington or in most of the AID missions we visited to begin implementing these future directions and that considerable uncertainty exists as to how to do this.

#### AID's ANALYSIS OF U.S. POPULATION ASSISTANCE

Under the leadership of its Bureau for Program and Policy Coordination, in 1976 AID developed a paper entitled "U.S. Population-Related Assistance: Analysis and Recommendations." In this important paper, AID evaluated its experiences with traditional approaches to reducing fertility in developing countries and suggested new directions for U.S. assistance.

The paper began by acknowledging that population growth makes the task of improving the lives of millions of people living at or near subsistence more difficult. It noted that couples, consciously or unconsciously, weigh the pros and cons of having another child or of accepting family planning to prevent a birth and that their views on the desirability of a child depend largely on the social, cultural, economic, political, and medical milieu.

The AID analysis stated that the number of children parents have is based on:

- The minimum desired number they would want even if the best possible family planning services were available.
- Any additional "insurance" births they may want to insure survival of the desired minimum.
- Any extra births they do not consciously seek.

It went on to say that providing better family planning services and information can avert the "extra" births, help reduce the insurance births, and can indirectly influence desired family size.

AID noted that it had devoted most of its population assistance to improving and extending family planning information and services. It stressed, however, that family planning services and information alone may not be enough to lower birth rates to the targets set by developing countries or to stabilize population levels, because for socioeconomic reasons, many parents may want three, four, or more children. Since large numbers of children may be desired for a variety of reasons, including help in agriculture, support in old age, and status, elements of the socioeconomic milieu which encourage large families need to be changed. According to AID:

"Focusing on improving the well being of the rural poor will generally help to lower fertility, while lowering fertility may in turn help improve living conditions particularly in poor, crowded, rural areas."

AID concluded that a package approach involving both development programs and policies and improved family planning services and information may be the most effective way to accelerate declines in birth rates. It proposed to help reduce population growth through:

--A cost effective mix of alternative approaches, including provision of more and better family planning services and information, exploration of the links between fertility and development, and addition of population-related components to education, health, nutrition, and rural development projects. Such projects would be funded by title X.

--Other development programs and policies supporting economic growth, particularly in ways that would encourage smaller families.

Development policies and programs identified by AID in the analysis that can encourage smaller families include:

"Policy statements favoring small families and opinion leaders' support for family planning.

"Laws and regulations raising the minimum age of marriage and easing access to and lowering the cost of family planning services.

"Increased education especially for women.

"Increased female employment in nonmenial occupations that compete with continual childbearing, bearing in mind the need to assure that children, particularly among the poor, can be cared for.

"Increased economic incentives for smaller families, whether for individuals or whole communities.

"Rural development promising higher incomes and more egalitarian distribution.

"Improved rural organizations like multi-purpose cooperatives and other such village organizations that can be used for a variety of related purposes like increasing income earning opportunities, improving health, or encouraging family planning."

In July 1976 AID sent a circular, "Future Directions of U.S. Population-Related Assistance: Population Analysis," to AID mission directors and others involved. Citing the analysis and planning paper described above, the circular stated that:

"AID believes that stimulating 'participatory' economic growth and reducing population growth together offer the best means of accelerating improvements in the welfare of the poor as our mandate requires. \* \* \* [The] future directions \* \* \* sets forth a broader and even more ambitious approach for AID in helping reduce population growth."

The circular stated that, while the new future directions build on what has gone on before, they represent substantive changes in emphasis and new approaches, particularly in non-title X areas. The circular noted that AID field personnel should develop multiyear population strategies, including projects consistent with the new directions, and asked for mission views.

We noted, however, that AID has still not taken major actions to actually design and carry out development projects to lower fertility. (See chs. 9 and 10.)

#### NEW SECTION OF THE FOREIGN ASSISTANCE ACT

In the summer of 1976, a proposed new section of the Foreign Assistance Act of 1961, as amended, was circulated and subsequently included by AID in its congressional presentation for fiscal year 1978, and with some modification, was enacted by the Congress. (See p. 6.) The section stated that particular attention should be given to the interrelationships between population growth and development and the impact on fertility of development assistance projects. Motivation to plan families should be built into appropriate development projects. It also authorized studies of this complex subject.

#### FIELD REACTION TO FUTURE DIRECTIONS

In early 1977 a cable was sent to AID missions overseas citing the (then) proposed new section of the Foreign Assistance Act and, building on the circular and the analysis paper discussed above, briefly described areas with potential for influencing fertility (female education and employment, age of marriage, etc.). The cable urged the missions to discuss these matters with host country officials and the U.S. Ambassador and country team.

We discussed mission officials' reactions to the circular and the proposed new section during our field visits: Their understanding of them, what actions they had taken to date, and what they planned to do. Generally speaking, we found that AID mission officials did not fully understand the implications and intent of the future directions, were skeptical about its usefulness, and/or believed that they did not have the staff to thoroughly carry out integrated planning. This is discussed in more detail in chapters 9 and 10.

## CHAPTER 6

### KNOWLEDGE OF DETERMINANTS AND

#### CORRELATES OF FERTILITY

It is generally recognized that rapid population growth in developing countries has a negative impact on efforts to improve the quality of life. It is also increasingly clear that major population programs and development efforts are needed if goals to reduce the population growth rate are to be achieved.

In many developing countries, high fertility is encouraged by high infant and child mortality, lack of education and job opportunities for women, economic contributions of children in subsistence agriculture, and supporting cultural pressures. (The limited availability of family planning services and information also contributes to high fertility.) While fertility declines in developed countries have been associated with social and economic development, it is likely that waiting for the developing countries to reach similar levels will, at best, take too long and may also, in the face of rapid population growth, prove impossible.

Because underlying social and economic factors contribute to the lack of widespread use of family planning services, as discussed in chapter 3, we believe such factors must be explored. Their modification must be made an explicit objective of development programs. It appears that there is no single factor and no simple answer: the influence of a variety of factors may be responsible for fertility declines. A new section in the Foreign Assistance Act and AID's future directions policy (see ch. 5) are keyed toward such considerations.

We have, however, identified a number of constraints to effective implementation of this policy. (See ch. 10 and 11.) One problem is that not enough knowledge on fertility-influencing factors is available to plan the country-specific mix of projects that would contribute most to fertility reduction goals while achieving other development goals. A considerable amount of academic research has been done, particularly studies focusing on one variable and on fertility change. However, there have been surprisingly few field studies actually testing the relative impact of different variables on fertility, and few instances in which fertility-related data have been recorded as part of other development projects. (See ch. 9.)

This chapter summarizes information on determinants of fertility that we became aware of during our work in the United States and overseas. It indicates the high potential for reducing fertility through development but, at the same time, the need to develop a body of practical knowledge to serve as a basis for planning.

### ECONOMIC FACTORS AND FERTILITY

A number of studies show that fertility is generally inversely related to income levels. The demand for large numbers of children may be reduced because parents decide to invest time and increased income in ways viewed as more desirable. For example, more schooling may be provided for existing children.

This substitution effect (substituting other "goods and services" for children) is most likely to occur with improved availability of health, education, and other services. Noting this, a major review of social research on fertility done by the Interdisciplinary Communications Program associated with the Smithsonian Institution went on to say that much of the available research does not adequately distinguish between the effect of income itself and the effect of improved services on fertility. Others have concluded that redistribution of income may lower fertility in the long run, but that this may work through other variables associated with modernization.

Economic improvement per se may not lead to lowered fertility, however, so it is critical to identify those aspects which appear influential. Factors frequently cited include increased family income (as opposed to increased gross national product, which may not be evenly distributed), female employment incompatible with constant child-bearing and rearing, reduction in the potential contributions of child labor, lowered infant mortality, and better opportunities for advancement for children of smaller families.

We learned of one study which found that the more satisfied a Pakistani couple is with their income, the less the probability of their wanting additional children. An interesting association between rural electrification and lowered fertility has been noted in the Philippines; AID funded a survey of the social and economic impact of electrification of the rural western Misamis Oriental Province. Researchers from Xavier University in doing this survey found that the birth rate dropped from 45.9 per 1,000

in 1971 (the year the project's first section was energized) to 31.4 per 1,000 in 1974. Furthermore, fertility was highest in households below subsistence income levels. The researchers commented that the project, which provided jobs and raised income levels, made possible opportunities to purchase and use electrical labor-saving devices, such as irons, and opened new work opportunities for women; this seemed to be responsible at least in part for the lowered birth rates. They emphasized, however, that further research in the province is needed to determine scientifically the relationships. (See pp. 75 and 76.)

A Cornell University staff paper on the demographic transition in Sri Lanka found that as household income increased, the average marriage age for women rose while completed family size declined. It concluded, however, that because of the low growth rate of median real income in the 1953-73 period (averaging under 1 percent annually), it was unlikely the rate of growth itself was sufficient to account for the fertility decline, from 38.7 to 27.8 per 1,000. It noted, however, that there was a major shift in income distribution during the period: per capita income of the lowest group increased 139 percent while that of the highest income group rose only 12.5 percent. The study observed that the Government's social welfare and income support policies had improved the standard of living for many Sri Lankans and, together with a progressive tax structure, substantially redistributed income. To the extent social welfare programs were favored over investment, however, overall development was slowed. The study indicated that economic development was not a prerequisite for the demographic transition but that technology and social advances lowered mortality, and fertility declined in spite of slow economic growth in the urban-industrialized sector.

The Cornell study said of the three commonly cited preconditions of reduced fertility--reduced level of infant mortality, increased education and new social roles for women, and a reduction in the economic utility of children--the first two and possibly the third have been met in Sri Lanka as a result of Government policies. The study concluded that it would be "presumptuous" to speculate which of the Government's policies has been most effective in lowering fertility because efforts to associate such declines in the West with a single socioeconomic variable were not successful. Rather, Sri Lanka's policies created "an atmosphere conducive to lowered fertility." The study recognized that family planning services are provided at Government maternal and child health clinics, but a good deal of family planning is practiced outside the program.

In Sri Lanka, we found that the economy was depressed and unemployment was high. Government social welfare programs appear to have created a positive environment for fewer births by lowering infant mortality, reducing the economic utility of children, and improving the status of women in society. Under these conditions, the depressed economic situation is thought to have motivated couples to delay marriages and have fewer children.

A recent review by an international population expert of data on demographic change in India's southwestern state of Kerala made similar observations. It noted that per capita annual income in Kerala of \$80 was lower than the all-India average, 90 percent of the people had been classified as malnourished, and population density was higher than in Bangladesh. At the same time, its birth rate had been falling since the early 1960s and was now 31.9 per 1,000, compared to the all-India average of 37. This drop was attributed to broad social responses to social and economic advances: radical agrarian reform redistributed income and wage rates were high compared to those in India as a whole; agricultural workers were granted employment security and welfare and pension funds; universal primary education and mass literacy have been accomplished; there has been considerable political participation in development, with advances in social and economic mobility; and health services have been greatly expanded (the death rate of 9.2 per 1,000 compares to the Indian average of 16.9 and the infant mortality rates are 55 and 122, respectively).

The researcher did not attempt to determine which factor had the strongest impact on fertility in Kerala, noting fertility and mortality declined as education and income rose in response to income redistribution, and fertility declined as opportunities other than childbearing became available and the state assumed welfare functions traditionally fulfilled by children. He concluded that development thus far has been achieved through strategies based on equity considerations.

The President of the World Bank Group has stated that because of inequalities in income distribution, national economic growth may not significantly lower fertility. He noted that a study of 64 developing and developed countries showed that more equitable income distribution and broader distribution of social services is strongly associated with lower fertility. The productivity of small farmers and landless poor who migrate to the cities must be increased. He concluded that:

"Unless the benefits of economic growth are directed more equitably to the lower 40% of the income groups, where in fact fertility rates are likely to be the highest, then economic growth as such will not move the society forward at an optimum rate of progress."

There are no hard data on the length of time after various economic improvements are made before fertility reductions begin to be seen. AID-sponsored consultants analyzed the probable demographic impact of Pakistan's preliminary staff papers for its fifth development plan (1975-80). They stated, generally, that changes in areas indirectly affecting fertility (female education and employment, infant mortality, and income level and distribution) would not be expected to reduce fertility rates for a number of years--perhaps 15 to 30. Population Council officials we met with also underscored the long-term nature of these changes.

#### FEMALE EMPLOYMENT AND FERTILITY

Female employment is often cited as a determinant of fertility, but the Interdisciplinary Communications Program associated with the Smithsonian concluded "female employment depresses fertility only under very specific conditions--conditions which do not prevail in most developing countries." It found, generally speaking, that females in rural areas work at jobs compatible with childbearing and that such work is not associated with lower fertility. It cited indications that in urban areas the more educated women, working in well-paid and/or highly satisfying jobs, are more likely to limit fertility, but noted that this group of women is small in developing countries and the type of jobs that appear to lower family size desires are only a fraction of available jobs.

A study in the Philippines found working wives had fewer children than nonworking wives. It also associated relatively high fertility with farming and blue-collar worker categories and lower fertility rates with professional and white-collar occupations. The urban influence was again noted--the average number of children ever born was higher in rural than urban areas for both working and nonworking women.

A study in Pakistan found a significant difference in the desire for additional children between working and nonworking women--larger numbers of those who were employed by someone else did not desire additional children than those

who had never worked. A limited urban survey in Colombia found that the average number of live births was 2.9 for women who worked at home and 1.5 for those who worked outside the home.

### FEMALE EDUCATION AND FERTILITY

Education is a vital component in enhancing the status of women. It is generally acknowledged that female education is associated with reduced fertility. While too little is known about the precise reasons to make the most cost effective policy recommendations, it is clear that increased female education, desirable for a number of reasons, is relatable to lower family size. Data from Sri Lanka supports this association. That country's education system reaches most of the country--most youths receive a primary education and almost 40 percent of those 15 to 24 years old are still in school; men and women have received equal benefits. Fertility in Sri Lanka has declined sharply, although factors other than education are also believed influential.

A study in Thailand showed that the number of children dropped sharply as the mother's education level increased. The national average was 4.37 children for women who had not completed 1 year of schooling.

<u>Number of years of schooling</u>	<u>Completed fertility</u>
Primary: 1 to 4 years	4.13
Secondary: 1 to 6 years	3.3
Some university work	2.28

A study in Egypt showed live births per woman averaged 7.6 for illiterate women, 6.7 for women who completed primary education, and 3.6 for women who completed college.

A Ghanaian demographer found the same downward pattern, and also noted the extra impact of the urban influence.

<u>Schooling</u>	<u>Completed fertility</u>		
	<u>All women</u>	<u>Urban</u>	<u>Rural</u>
No education	6.2	5.7	6.2
Elementary	5.5	5.2	5.9
Secondary	2.1	2.5	1.0
University	0.4	0.5	-

The Ghanaian study shows that the largest drop is associated with secondary schooling.

A study in Pakistan found that as women in rural areas attained a higher level of education, they tended to have fewer children but found no relationship between education and fertility in urban areas. The study did not examine the reasons for this. Another report, based on research in other Islamic societies, indicates at least 6 years of primary education might be required to bring about significant declines in fertility.

In Colombia, we found that even incomplete primary education was associated with lowered fertility in urban areas. The average number of live births, according to a survey, by education level was as follows: illiterate--3.9; primary incomplete--2.9; primary complete--2.2; secondary incomplete--1.6; secondary complete plus--1.2.

AID, in its 1976 population analysis paper (see pp. 37 to 39), stated that female education, even if pursued only 4 to 6 years, seems to encourage significantly lower fertility. It said the reasons why are not entirely clear but may relate to subsequent work outside the home, "middle-class" aspirations shared with an educated husband, or an introduction to the idea that women may change their lives.

The President of the World Bank Group, in an April 1977 address on the world population problem, suggested a number of ways to encourage a desire for smaller families, including expanding basic education and substantially increasing the proportion of girls in school. He noted that of all aspects of social development, educational level appears most consistently associated with lowered fertility but that women in most developing societies do not have equal access to education. In Latin America, studies in districts as diverse as Rio de Janeiro, rural Chile, and Buenos Aires showed that women who had completed primary school averaged two children fewer than those who had not. He said education's impact on fertility comes through delay in marriage age, exposure to information on family planning, increased opportunity to find employment outside the home, a desire to provide children with greater opportunities, exposure to practices that reduce infant and child mortality, and --by keeping children in school--reduction of their economic contribution. He concluded:

"\* \* \* perhaps the greatest benefit of education to both men and women in heavily traditional environments is that it broadens their view of the opportunities and potential of life, inclines them to think more for themselves, and reduces their suspicion of social change. This creates an intellectual environment in which important questions such as family size and contraceptive practice can be discussed more openly."

### INFANT MORTALITY AND FERTILITY

Reducing infant mortality has the immediate, direct impact of increasing the population growth rate. Studies indicate, however, that declines in fertility levels over time are associated with falling infant mortality rates. The reality of high infant mortality often encourages parents to have more children than the desired total number to allow for deaths. AID, in its 1976 policy analysis, refers to these as "insurance births." (See ch. 5.)

In Sri Lanka we learned that infant mortality dropped sharply from 141 per 1,000 in 1946 to 82 per 1,000 in 1950; 57 per 1,000 in 1960; and then fell more gradually to 43 per 1,000 in 1971. The birth rate for these years was 37.4, 39.7, 36.6, and 30.1. A Cornell University study done in Sri Lanka stated that

"\* \* \* under the continued impact of declining mortality in general, and declining infant mortality in particular, a new demographic reality becomes recognized by potential parents: fewer births are needed to reach the desired family size. What is perhaps the major obstacle to a corresponding decline in fertility is thus overcome."

Pakistan has one of the highest infant and child mortality rates in the world. A study there reported that fertility was significantly higher among women who have experienced at least one infant death than among those who have not.

Number of children <u>who died</u>	Number of children <u>ever born</u>
0	3.41
1	4.26
2	5.38
3+	6.46

In the Philippines we saw data collected by the University of the Philippines on fertility and infant deaths. It showed the infant mortality rate has dropped from 80 per 1,000 in 1958 to 67.9 per 1,000 in 1972. It is estimated that the birth rate was between 46.8 and 51.9 in the 1950s and had fallen to 40.0 to 42.7 by 1970.

One study reviewed AID's "Knowledge, Attitudes, and Practices of Family Planning Surveys" of Ghana, Upper Volta, and Niger to assess the casual connection between infant mortality and fertility. It noted that

"\* \* \* in larger families the proportions of children dying in the early parities [birth order] were considerably higher than those dying at the same parities in small families. It would seem then that it is the early experience of child loss that leads women to have larger families."

A survey of social research on fertility determinants by the Interdisciplinary Communications Program associated with the Smithsonian states:

"\* \* \* families do respond quickly to reductions in infant mortality, and they will normally respond sufficiently to bring the number of births back into line with desired family size. As fewer families experience child loss, and as that experience permeates the cultural milieu, the number of births will be adjusted downward by means of the mechanisms and means which families have to reduce their fertility."

There is a question of timelag before change is apparent at the national level. In Sri Lanka, researchers noted that about 14 years--from 1946 until about 1960--lapsed before the decline in fertility began to be felt.

In his 1977 speech on the world population situation, the President of the World Bank Group stated that infant deaths per 1,000 averaged 142 in Africa, 121 in Asia, and 60 in Latin America--compared to about 20 in developed countries. Death rates are high largely because of low nutritional standards, poor hygienic conditions, and inadequate health care. Health services in most developing countries are devoted to urban elites, and fail to reach 90 percent of the people. He continued by saying some poor countries have made

major advances, citing the drop in infant mortality and fertility in Sri Lanka. Others with higher per capita income have not. Turkey, for example, with per capita income in 1975 of \$860 (compared to Sri Lanka's \$150) has an infant mortality rate per 1,000 of 119 and a birth rate of 39, significantly higher than Sri Lanka's.

#### OTHER FERTILITY INFLUENCING FACTORS

In addition to socioeconomic factors discussed above, legal, administrative, and cultural factors influence fertility. Legal factors include laws banning or permitting the sale, advertisement, and use of various types of contraceptives. The legal age of marriage can also be raised or lowered.

Governments can discourage childbearing through use of incentives and disincentives. Administrative factors are particularly relevant in countries that provide services nationwide and that have a relatively effective administrative network. Incentives can include payments for families that use contraceptives or that have small numbers of children. Payments can be made either immediately or later to compensate for the old age security traditionally provided by children. Disincentives can include escalating hospital delivery fees and making less desirable school assignments for children other than the first two. Singapore is most often cited as the country with the most extensive incentive/disincentive program. Incentives and disincentives may, however, pose serious moral questions.

Cultural factors, which in some instances relate to education and other factors discussed above, are less amenable to direct modification by government policy. Perhaps the most pervasive is the status that fertility accords women in many cultures. In many cases, a woman's primary status-giving role is childbearing. Furthermore, certain religious beliefs may cause resistance to family planning.

## CHAPTER 7

### AID POPULATION RESEARCH

Structuring development assistance to have the greatest impact on fertility consistent with other goals requires considerable knowledge about the determinants of fertility. The previous chapter presented some of the research findings in this field. This chapter assesses what AID has done to expand knowledge.

Most of AID's population research has been managed by the Office of Population within the Bureau for Population and Humanitarian Assistance. <sup>1/</sup> We worked with officials responsible for the Office's six goal areas to determine what portion of Office spending was for determinants of fertility research. The officials generally categorized all centrally funded projects in the 1965-76 period as research, research component, or nonresearch, and then identified socioeconomic determinants of fertility research.

We found that in this period a total of \$380 million was obligated for about 140 projects. Of the \$68 million allocated to research projects, only about 4 percent went to projects which dealt, wholly or in part, with determinants of fertility. In addition, projects totaling \$54 million included research components. Some of these examined determinants of fertility. Some determinants of fertility work may have been done as part of bilateral projects developed by AID missions, but we could not get summary data on such research from AID officials in Washington.

We believe that the Agency has not given high priority to developing knowledge of the determinants of fertility--a critical element in the implementation of its future directions policy.

### CENTRALLY FINANCED POPULATION PROJECTS

The following chart reveals that over half of the funds managed by the Office of Population have been allocated for family planning services, about 6 percent for projects to improve information and education in support of population

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<sup>1/</sup>A late 1977 reorganization placed the functions of this Bureau in the new Development Support Bureau.

and family planning programs, and about 13 percent for research to develop better means of fertility control and to improve distribution. Work in other goal areas also emphasizes family planning. For example, about two-thirds of the 4,000 persons trained in the United States under manpower and institutions goal area projects were clinical personnel.

Classification of Office of Population Projects

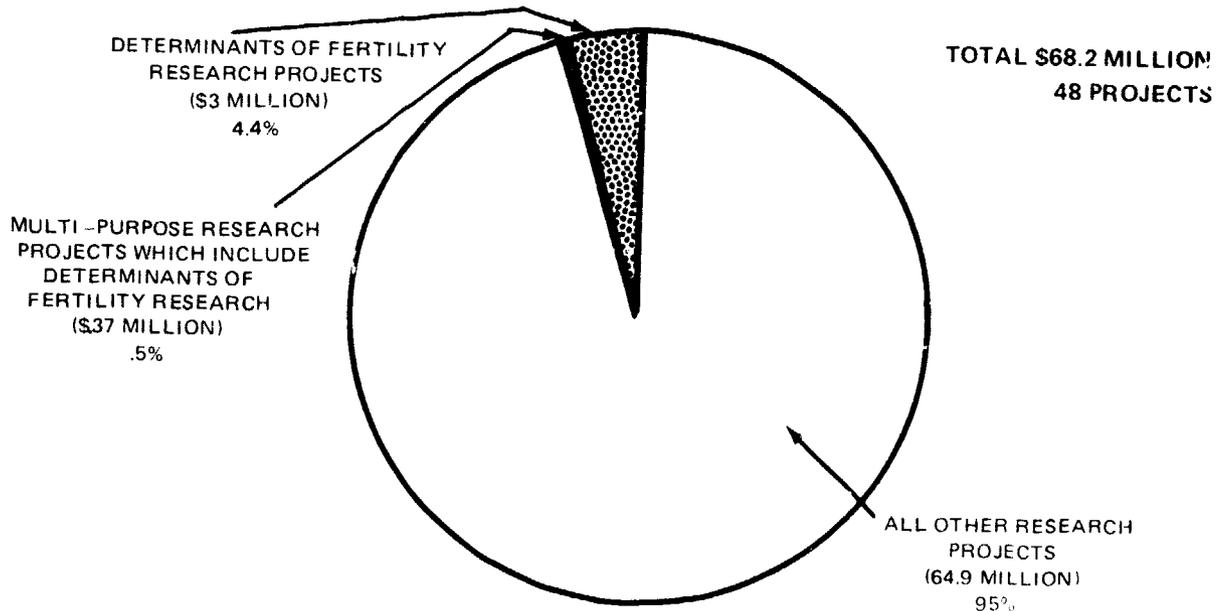
Fiscal years 1965-1976

(000 omitted)

Goal	Research		Research component		Non-research		Total	
	Number projects	Funds	Number projects	Funds	Number projects	Funds	Number projects	Funds
Demography	4	\$ 6,093	10	\$21,027	5	\$ 5,807	19	\$ 32,927
Policy	15	5,126	9	13,975	4	1,873	28	20,974
Research/ fertility control	25	45,821	-	-	3	4,386	28	50,207
Family planning	4	11,183	-	-	19	204,290	23	215,473
Information/ education	-	-	4	4,204	14	19,784	18	23,988
Manpower and institutions	-	-	8	14,910	15	21,677	23	36,587
Total	<u>48</u>	<u>\$68,223</u>	<u>31</u>	<u>\$54,116</u>	<u>60</u>	<u>\$257,817</u>	<u>139</u>	<u>\$380,156</u>

Of the \$68.2 million obligated for projects that Office of Population officials described as research projects, only about 4 percent was provided for determinants of fertility research.

OFFICE OF POPULATION RESEARCH PROJECTS  
(Fiscal year 1965-1976)



Of the \$122.3 million devoted to all research projects and to all projects with research components, only \$16 million (13 percent) went to projects which included any research on socioeconomic determinants of fertility.

In commenting on a draft of this report, Office of Population officials expressed concern that the above figures did not fully reflect the amount of research in this area. Recognizing that the classification of projects is judgmental, these officials again reviewed Office research projects, adding obligations for the transition quarter and fiscal year 1977 (for larger projects) and including all determinants-related research (not just socioeconomic determinants research). They calculated that about \$140 million had

been obligated for research projects and projects with research components. They told us about \$12.5 million had been obligated for projects that focused on fertility determinants such as the 1976 Indonesian Intercensal Survey and a study of Human Fertility Patterns--Determinants and Consequences. They said another \$14 million was devoted to determinants research components of other projects like the World Fertility Survey, of which 50 percent (or \$4.2 million) was for determinants research.

It is our view, however, that an assessment of the priority given to research on socioeconomic determinants of fertility should be limited to research actually focused on this subject.

We recognize that the type of studies included by AID, such as the above examples relating to demographic data and attitudes toward family planning, are important for a number of reasons, including providing a base for research on socioeconomic determinants of fertility. We continue to believe, therefore, that the Office of Population has not given high priority to the acquisition of knowledge needed to structure country-specific development assistance projects to influence fertility.

In pointing out the amount of funds devoted to such research, we are not, however, implying that the needed action is simply to fund more studies. (See recommendation on p. 90.)

#### DETERMINANTS OF FERTILITY RESEARCH

The Office of Population's Population Policies Development Division has had primary responsibility for research on social and economic determinants of fertility within AID, but analysis of the projects in its goal area over the fiscal year 1965-76 period shows that such research has not been accorded high priority by the Office. Of the \$21 million obligated for 28 projects, a total of only about \$3 million went to 9 research projects that dealt wholly with socioeconomic determinants of fertility. Eight of the nine involved less than \$500,000 and these funds were obligated over periods ranging from 1 to 4 years. (Other research and research component projects included some research work on determinants of fertility, but an AID official said it was not possible to give an exact percentage of the dollar amount applicable to such research.)

The largest of the nine socioeconomic determinants of fertility research projects was a contract with the American Institutes of Research to establish an International Reference Center to collect data on pregnancy termination and to study behavioral factors associated with acceptance of new fertility control measures; \$842,000 was obligated in fiscal year 1971. About \$471,000 was obligated in fiscal years 1974-75 to Rand Corporation to determine the relationship of fertility and biomedical, institutional, and socioeconomic factors in Malaysia; final results are not yet available. Under a \$379,000 project, the third largest contract was signed with the Smithsonian Institution and the American Association for the Advancement of Science to develop a stronger empirical basis for the formulation of national population policies in family planning and other action programs.

Other projects had determinants of fertility research components. For example, under a \$2 million contract the California Institute of Technology was to establish regional observers and compare the economic and social context of population policies and family planning programs. Under a \$4.2 million contract, the Interdisciplinary Communications Program associated with the Smithsonian Institution administered small grants to individuals in the United States and developing countries for nonbiomedical, noncontraceptive analyses and evaluation. The 1974 monograph "The Policy Relevance of Recent Social Research on Fertility," used in the previous chapter also resulted from this contract. An AID official said both projects had research components relating to the consequences of fertility, laws affecting population growth, and socioeconomic determinants of fertility.

Under a \$1.2 million contract the American Association for the Advancement of Science organized working groups of U.S. and developing country anthropologists and others to provide policymakers with information on consequences of rapid population growth and to help family planning program administrators identify and modify cultural factors associated with expansion and improvement of family planning delivery systems.

In addition, a small amount of determinants of fertility research has been done in the manpower and institution development goal area under subprojects of AID's University Services Agreement grants with Johns Hopkins University and the Universities of Michigan and North Carolina.

CURRENT OFFICE OF POPULATION  
DETERMINANTS OF FERTILITY RESEARCH

We were told by an Office of Population official that policies and procedures for obtaining determinants of fertility information in the past had been somewhat "academic bound" and had depended too much on the researchers to provide what AID wanted. This generally resulted in complex research products that could not, practically, be used in developing countries. Also, with limited control over research products, research was scattered. The Population Policies Development Division hopes that it will obtain more useful products by being more involved and by implementing these more rigid criteria: the researcher must clearly define the problem to be addressed and must be responsible for disseminating research results.

The division chief emphasized that a tremendous need exists to improve policy tools through experimental research. He cautioned, however, that because of the level of current division staffing, sharply increased amounts of research could not be adequately administered. He also said that it was extremely difficult to find competent researchers in this field. In addition, he pointed out that there is a strong view within the Office of Population that such research should be done only after family planning programs are in place because once they are established, the influences on fertility may change.

Many Population Policies Development Division projects were approaching terminal dates in 1976, and a new group was being planned. Several aim at developing data on determinants of fertility useful for developing policies. Proposed projects include a \$5 million, 3-year study on policies related to fertility determinants. Its initial and basic question is: How much of the observed variation in fertility can be directly attributed to family planning program activity and how much can be attributed to variables other than family planning? This project will look at countries in which contraceptives are widely available to identify determinants of fertility and countries where family planning programs have stagnated (such as Pakistan) to identify the determinants. Another project will find fertility-related studies, such as the relationship between female education and fertility in Jamaica. A third population policy analysis project is a 3-year, \$3 million contract with the Batelle Memorial Institute aimed at identifying and examining policy and social barriers to family planning and other social issues which impede development; a follow-on

to this project is also envisaged. In addition, the Bureau of Program and Policy Coordination was considering undertaking some determinants of fertility research.

We believe AID must take a number of actions to successfully implement its future directions policy. A broad strategy is needed, and enough is known to select areas with high potential. It is now time to assess actual development projects for their impact on fertility and to conduct fertility surveys in conjunction with pilot projects, as we recommend on page 90. Action along these lines is in accord with section 104(d) of the Foreign Assistance Act of 1961, as amended.

## CHAPTER 8

### NEED TO CONSIDER POPULATION GROWTH IN

#### SAHEL DEVELOPMENT PLANNING: A CASE STUDY

The United States is involved in a long-term, multinational development program for the Sahel region of central and western Africa. AID is participating in the specifically created planning and coordinating structure, the Club du Sahel, in which Sahelian states and donors are cooperating. This is a major development effort. In early 1977 AID informed the Congress that a \$10 billion, 10- to-15 year program was envisaged, with the United States contributing 10 to 20 percent. <sup>1/</sup> Other estimates have seen a larger and longer program.

The development effort grew out of the experiences of the severe 1968-73 drought in Sahel, the directly related emergency assistance program, and realization that there was no long-term development program. The program's goals are to reduce the consequences of any future drought, bring about food self-sufficiency, and accelerate long-term social and economic development.

We became interested in mid-1976 in the extent to which population growth was being considered in Sahel development planning and subsequently examined the program from this aspect as a special part of this report. Since the program is in its early phases, it provides an unusual opportunity to integrate considerations of population growth and development inter-relationships before major social and economic changes are made. We felt it would make a good case study.

Since the development program is intended to be comprehensive and integrated, U.S.-financed projects need to be reviewed in the context of the overall effort. We therefore discussed population growth and development in the Sahel with a wide range of concerned officials, including those from the United States, other national donors, U.N. organizations, the Club du Sahel, and the Sahelian states of Senegal, Mali, and Upper Volta.

We found that, in general, population growth was not being given adequate attention. Although planning was going

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<sup>1/</sup>An amendment to the appropriations bill for fiscal year 1978 limits the U.S. share to not more than 10 percent.

ahead in all sectors, we learned that simple projections of population growth based on inadequate population surveys had been used to calculate needs. Further, we found that there had not been a careful estimate of the impact population growth would have on achievement of program goals to determine if higher or lower growth rates would be desirable.

A summary of information on the drought and relief effort in the Sahel, AID's involvement in the long-term development plan, the Club du Sahel and assistance levels is provided in appendix v.

MORE THOUGHT NEEDED ON POPULATION  
GROWTH/DEVELOPMENT INTERRELATIONSHIPS  
IN SAHELIAN PLANNING

Although population growth and development interrelationships have been given some thought within certain Washington AID offices (see ch. 5), such relationships have not been adequately considered in Sahel development planning.

Since we began our review, AID has started some actions to improve the situation. For example, a health/population official with extensive population-program experience was transferred from the Office of Population to the task force in the African Bureau that is responsible for the Sahel program. In addition, that Bureau soon began developing a demographic project for Sahel. Much more needs to be done, however. Bureau officials concerned with project design, technical assistance, and program planning need to become more involved in considerations of the relationships of population growth and development.

Population growth has not been identified as a major problem or an official concern by Sahelian governments or the Club planners. Of the three Sahelian countries we visited, the governments of two--Upper Volta and Mali--have, at times, indicated a larger population would be in the national interest. While Senegal does not have a national policy to limit population growth, its President has recognized that rapid growth could have serious implications for achievement of development objectives. In a December 1976 speech, he noted that the April 1976 census, Senegal's first, had shown that population totaled about 5.1 million compared to 3.1 million at the time of independence in 1960. He stressed that the census showed that the growth rate was 2.9 percent--not 2.2 percent as previously thought by some--and that this meant that Senegal's population would double in 25 years, not 31 to 32 years as projected

in the government's planning documents. This is the first and only statement of concern about population growth by a Sahelian government leader that we are aware of.

A strong pronatal attitude still prevails in these three countries (Mali, Senegal, and Upper Volta), but we found it is being tempered somewhat by growing acceptance of child spacing in the context of health and family welfare. Senegal had the first Sahelian family planning center in its capital. Subsequently, a pilot clinic was established in Mali's capital. Mali was the first Sahelian country to modify provisions of the inherited French law that greatly restricted import and sale of contraceptives. An AID official told us that in December 1977 encouraging negotiations were underway which would add a family planning component to a rural health project soon to be implemented. In Mali, as well as Upper Volta, we found strong women's organizations working to gain support for family planning as a health measure. Family planning is still generally opposed if viewed as a means to limit national population size, however. Policies and programs relating to population growth have been influenced by the impact of the French colonial experience, inherited French pronatal laws, the cultural milieu, socio-economic environment, and a poor health situation.

We developed the following chart to show the impact population growth in the Sahel will have on food production, education, and health services, and the scope of effort needed to achieve Club goals of food self-sufficiency and social and economic development.

	Current ( <u>note a</u> )	<u>1985</u>	<u>2000</u>
Total population: Projections-- U.N. high growth estimates	26,100,000	33,000,000	51,300,000
Major grain production (metric tons): Projections based on Food and Agriculture Organiza- tion estimated kilograms per capita	3,669,000	5,478,000	8,430,000
Education: Current--children in primary school: Projection-- total children aged 5 to 15	902,000	8,862,000	13,858,000
Health (number of doctors): Projections--needs based on World Health Organization developing country goal of one doctor per 6,700 people	844	5,014	7,657

a/Most recent regional data available: population, 1975; food produc-  
tion, actual production in 1974; education, 1973; health, March 1977.

The magnitude of the task is also shown by an illustrative projection of the chairman of the Development Assistance Committee (DAC), Organization for Economic Cooperation and Development (OECD). The chairman noted that to make Sahel self-sufficient in food by 2000, output of meat supplies and grain from rain-fed farming must be more than doubled, and cereals obtained by irrigated farming must be increased at least five-fold.

In our discussions with AID, other donor, and Sahelian officials in Paris and the Sahel, we found, with few exceptions, little evidence of concern for the implications of population dynamics for development in the Sahel. What concern we did find was generally limited to migration, which is, of course, an important factor. Further, we did not find a readiness to confront population growth and development interrelationships early in the development planning process.

The reluctance to address these interrelationships is, significantly, evident in the deliberations and actions of the Club Working Group. Population growth and related demographic factors, such as migration, manpower availability, and age distribution, clearly affect the work of many of the Working Group teams, but demography as a separate topic falls within the broad mandate of the human resources team. In fact, the team agreed at its December 1976 meeting that its scope includes "the study of demographic phenomena, particularly migration patterns and the growth rate of population."

The human resources team met in March 1977, and AID presented its proposed demographic project. (See p. 67.) The team's health commission report recognized the advantages of child spacing as a part of maternal and child health programs. It also noted there was a lively discussion over the question: Is the Sahel suffering from population pressure or will it soon? In general, it said, the Sahelian countries were pro-natal. The report stated that there are economic advantages of a long-term reduction in the growth rate, but that the demographic transition from high birth and death rates to low birth and death rates will not take place until after death rates are lowered. It recognized that health projects will lower death rates, and with continuing high birth rates, the percentage of dependents will increase.

In the May 1977 Synthesis Report "Proposals for Drought Control and Development Programme and Strategy for the Sahel," to the Permanent Interstate Committee for Drought Control in the Sahel (CILSS) and the Club, there is no reference to population growth at all as a possible constraint

to development, or to the need to determine if rapid growth is a constraint. Population growth, where it is mentioned, is treated as a factor beyond influence. Even the impact of health and nutrition programs on lowering the mortality rate and increasing the population growth rate was not mentioned.

In our discussions, we found that population growth was generally viewed as an independent variable. Projections of growth, admittedly weak, were accepted for planning purposes. We were not told of any studies that assessed the cost and effectiveness of reaching a particular objective if a lower growth rate prevailed. We found no consensus as to whether rapid population growth is desirable to spur development by providing an increased labor force, etc., or is undesirable because benefits of development (education, health services, etc.) are diffused and diluted over increasing numbers of people.

The chairman of DAC, OECD, told us it is essential that the Club consider population if its main goal--food self-sufficiency in the Sahel--is to be realized.

Several Club Working Group team members, responding to our questions, indicated that the lack of good demographic data was hampering such considerations and that they would like to have better demographic information in order to develop their strategies. For example, members of the team dealing with irrigated agriculture said that they needed to know if adequate labor will be available to farm newly irrigated land when planning irrigation projects.

#### BETTER DEMOGRAPHIC DATA NEEDED FOR PLANNING

The United States and other donors are using U.N. demographic data in Club planning for the Sahel development plan. Since this data was compiled from sample surveys conducted in 1960-61 and 1970-71, several officials questioned the accuracy and reliability of that data for making accurate population estimates and projections.

Until the recent UNFPA-supported censuses in Mali, Senegal, and Upper Volta, no donor or host country had made any formal effort to develop better demographic data in these countries. Census results, which have been published in Senegal and Upper Volta, show that previous U.N. estimates were substantially in error. The chart on the next page illustrates the differences.

Population in 1975  
U.N. estimates                      Census totals

(millions)

Senegal	4.5	5.1
Upper Volta	6.0	5.6

Census results for the other countries were not available, so the margin of error could not be determined.

AID and Club officials agree that accurate and reliable demographic data is necessary to make good population estimates and develop projects requiring (1) long-range planning and (2) large capital commitments.

Meeting Senegal's future food needs

We analyzed the implications of inadequate demographic data for achievement of food self-sufficiency in Senegal. <sup>1/</sup>As noted earlier, planning has been based in part on U.N. estimates of total population as well as the rate of growth that were too low. A comparison of the U.N. data being used by the Club and current census information shows the following:

<u>Year</u>	<u>U.N.</u>	<u>Census (note a)</u>	<u>Difference</u>
	----- (thousands) -----		
1975	4,452	5,085	633
1980	5,086	5,866	780
1985	5,833	6,768	935
1990	6,706	7,808	1,102
1995	7,558	9,007	1,449
2000	8,465	10,391	1,926

<sup>a/</sup>The 1975 figure is the actual census figure; other year figures are projections from the 1975 data arbitrarily using a constant 2.9 percent growth rate, estimated by some officials as the current growth rate in Senegal.

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<sup>1/</sup>Food self-sufficiency has yet to be precisely defined and is, at least initially, being considered a regional goal. However, since Senegal is one of the largest Sahelian cereal producers, we selected it as an example.

The U.N. Food and Agriculture Organization (FAO), in its study of Sahelian agricultural potential, estimated Senegal's food consumption per capita and calculated total food consumption based on the U.N. population estimates shown on the previous page. Using FAO-estimated per capita food consumption, we calculated total food consumption for the year 2000 using our projections based on the recent Senegal census data.

	<u>Food consumption measured in metric tons, based on</u>		
	<u>FAO/U.N. date</u>	<u>New</u>	
	<u>(note a)</u>	<u>census data</u>	<u>Difference</u>
------(thousands)-----			
Wheat	255.6	313.8	58.2
Rice	509.6	625.5	115.9
Corn	138.8	170.4	31.6
Millet	<u>829.6</u>	<u>1,018.3</u>	<u>188.7</u>
Total	<u>1,733.6</u>	<u>2,128.0</u>	<u>394.4</u>

a/FAO estimates of food production were only projected to 1990. We extended these production estimates to 2000 based on its estimate of population data and average consumption per capita.

The shortfall of 394,000 metric tons is clearly significant. It could mean that the food requirements of 1.9 million people will not have been planned for and that Senegal could fall far short of achieving food self-sufficiency by the end of the century. We do not know if the FAO calculations are currently being analyzed in light of the recent census to determine if additional food can be produced or acquired.

Also important in planning for food self-sufficiency are estimates of rural and urban populations and age distribution. We calculated the increase in per capita food production required to reach self-sufficiency, using U.N. data and data based on the recent census, defining potential food producers and those people, age 15 to 64, living in rural areas. Because the percentage of potential food producers is projected to decrease due to urbanization trends, the required amount of food (cereals) produced per rural worker will have to double to sustain self-sufficiency in the year 2000.

While other factors, such as advances in technology and expansion of irrigated agriculture, are obviously important, it is also clear that estimates of the labor force, rural-

urban distribution, and age distribution are critical in planning for food self-sufficiency.

Senegal River Basin Development:  
A case in point

To demonstrate problems that might develop without adequate consideration of population/development interrelationships, we analyzed one important program, the Senegal River Basin Development. Implemented by the Senegal River Basin Development Authority (OMVS), <sup>1/</sup> it is one of three major regional river basin programs in the Sahel--the other two are the Niger River Commission and the Lake Chad Basin Commission. Parts of Senegal, Mauritania, and Mali are within the Senegal River Basin.

OMVS plans for the integrated development of the Senegal River Basin will require 35 years (1975-2010) and an investment of about \$3.7 billion. As of June 1976, total commitments to OMVS, excluding U.S. commitments, were \$254 million. U.S. proposals for fiscal years 1977 and 1978 are about \$6.56 million and \$6.14 million, respectively.

The main goals are to improve the living standards of the inhabitants through greater agricultural production and to provide foreign exchange to the nations through agricultural and mining product exports. Principal programs proposed include: (1) converting from flood recession agriculture to intensive double-cropped irrigated agriculture, (2) improving and increasing livestock production, (3) building agricultural processing plants, and (4) expanding the mining and processing of iron, bauxite, and phosphate. Improvement of inland fisheries, forestry, and tourism is also proposed. Key projects to be constructed in the medium term (to 1990) period will include a large upstream dam and powerplant and a low water control dam in the Senegal River delta. These structures will provide the water and energy needed for expanded agricultural and mining production and processing and the river control necessary for improved navigation.

Potential demographic problems in the overall effort have been noted, but the AID official in Senegal responsible for the OMVS program told us demographic studies have not

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<sup>1/</sup>The English translation of "Organisation pour la Mise en Valeur du Fleuve Senegal" is used in AID program documents.

been done. For example, development of the Senegal River Basin could be limited unless adequate manpower is available. About 40 percent of the total active male population in the river basin has migrated to the cities in search of jobs. The International Bank for Reconstruction and Development, in a recent report on the agricultural sector in Senegal, stated that "labor seems to be the most binding constraint" to increased agricultural production. In addition, officials point out that two or three harvests annually are necessary to make irrigated farming cost effective, which will require significant life-style changes because the people living there are used to only one harvest a year.

On the other hand, the future population in the area may be too large. AID points out that the river basin, with a current population of 1.6 million can absorb 700,000 more people. Considering the current growth rate of 1.8 percent (which takes into account the large exodus from the region), there will be 700,000 more people in only 21 years. If the project brings people back and slows future migration, the 2.3 million figure could be reached much sooner.

To complicate the picture further, research has shown that when nomads settle down to agricultural pursuits, fertility increases. Currently, large portions of Sahelian populations are nomadic. A study made in 1968 and 1969 in the Sudan compared women in nomadic tribes with women in tribes that have recently settled down to agricultural pursuits. The study found that in the tribes that had been settled longest, fertility had increased up to two children per childbearing woman. Noting that changes in marital structure explained less than 50 percent of the increase, it attributed the rest to health improvements. The study found that nomadic women had twice the incidence of miscarriage of settled women, and venereal disease and malaria affected at least 20 and 88 percent, respectively, of the adult nomads and were associated with fecundity impairments. The percentage of childless women was almost twice as high for nomads as for the longest settled tribe. Basic reasons cited for the fertility change included rising income, higher value of children in a settled environment, and less difficulty for women in bearing children. Observations similar to those in Sudan are being made by a private demographic student doing research in the Senegal River Valley. He told us that he had observed significantly higher fertility among settled agricultural workers than among nomadic peoples.

## Efforts to improve demographic data

Several efforts are underway to improve existing demographic data. The United Nations, through UNFPA has provided or will provide assistance to the Sahelian states for population censuses. These are the first nationwide censuses ever taken. In addition, several countries are scheduled to undertake surveys and to develop supplementary information on other demographic factors, such as migration, marital status, and religion.

Mali, Senegal, and Upper Volta have completed their censuses but have not completed analysis of the data. Some data is already available for Senegal and Upper Volta. (See pp. 62 and 63.)

In addition, the World Health Organization collected available health and demographic data under the auspices of the Club du Sahel human resources team. The data, gathered by representatives in the Sahel in late 1976 and early 1977, was to be used by the Club Working Group teams in the spring of 1977 in developing their sector strategies and projects.

AID has recognized the inadequacy of both the demographic data itself and the use of data that does exist. Since we began this review, it has begun planning a new activity on demographic data collection and analysis as part of its support for the Sahel development program. This is a 5-year, \$3.5 million project. AID expects to (1) cooperate with the Club in compiling and interpreting information for development and planning and for evaluation and (2) assist member countries in formulating appropriate programs of population and family planning. According to AID, the purpose of these efforts is to develop a comprehensive population program for the Sahel in order to build an indigenous capability in demographic planning, research and analysis, and family planning activities. AID hopes this project, accepted by the Club Working Group and CILSS in 1977, will provide a basis for considerations of population growth-development relationships in Sahel development planning.

An AID official told us in the fall of 1977 that AID had also begun working with CILSS to address the relationship between population and development by funding a regional study to be undertaken by the United Nations Institute for Economic Development and Planning in Dakar entitled "Demographic Considerations in Designing Staple Food Projects in Sahelian Countries."

In the spring of 1977, AID told us that it intended to assign at least one full-time population officer, possibly to the AID regional office in Abidjan, to help create awareness of the impact of population growth and foster greater private and government involvement in supplying family planning services. As of January 1978, this had not occurred.

#### PROGRAMS WITH POTENTIAL FOR LOWERING FERTILITY

Achieving goals of food self-sufficiency and advancing social and economic development in Sahel calls for a broad spectrum of programs. The Sahelian population could double by the turn of the century; assuring adequate education and health services and food to the present population is already beyond the capability of the countries. Many of the planned development projects will help lower death rates, consequently increasing the population growth rate. A large number of programs, however, provide opportunities to improve the quality of life in ways that will help lower desired family size.

The priority given to reducing Sahelian birth rates and the extent to which such opportunities should be exploited depends on assessment of and the national consensus concerning optimum population growth rates. These would be the growth rates most conducive to achieving development goals.

If it is agreed that rapid population growth is detrimental to achieving development goals, a number of actions should be taken. The overall development plan and its components should be explicitly analyzed in terms of their demographic impact on fertility. They could then be structured so as to have the desired impact, to the extent compatible with other objectives. (Projects should also be designed with their impact on migration in mind.) In designing health programs, for example, special emphasis could be given to projects designed to lower infant and child mortality and to make family planning services available. In the education field, schooling for girls could be given particular attention. In rural development work, opportunities for female employment incompatible with frequent childbearing could be made. Likewise, in designing irrigated and rain-fed agricultural projects, care could be taken not to create jobs for women that would be compatible with frequent childbearing, or to create work requiring large numbers of children. Programs designed to enhance the status of women and to provide opportunities for status other than by frequent childbearing could be encouraged. The importance of including women in development

efforts was recognized in the Sahel development strategy adopted by the Club du Sahel at its 1977 meeting. This recommendation could be actively supported. While not enough is known about the determinants of fertility to develop a detailed plan with multiple projects in the most cost-effective manner, enough is known to plan projects in areas associated with lowered fertility. (See ch. 6.)

Certain Sahelian states are beginning to recognize the benefits of child spacing in improving maternal and child health. As demand for family planning services increases with social and economic change, ways to provide these services can be developed.

### CONCLUSIONS AND RECOMMENDATIONS

An ambitious and costly development effort in the Sahel is planned. We believe that planning to reach development goals efficiently, economically, and effectively must take into account population growth and must assess the varying impacts of alternative growth rates. If smaller populations than would exist at current (or increased, as is expected) growth rates would clearly accelerate achievement of these goals, development programs that seek to lower desired family size and birth rates should be made part of overall planning.

Our fieldwork generated concerns that interrelationships between population growth and development were not being given adequate consideration in Sahelian planning, and we formally expressed our views to the AID Administrator on the need for the United States to encourage and support such considerations. We did this so discussions could be initiated at the spring 1977 meetings of the Club du Sahel Working Group and the full Club meeting. AID agreed with our observations and reported actions initiated and planned. At the meetings, AID discussed its demographic project (see p. 67), which was accepted by the Working Group's synthesis and human resources teams and by CILSS. It was agreed that this project would be coordinated with the Sahel Institute in Mali which is to have a demographic unit funded by AID. In addition, AID is providing a public health doctor with family planning experience as an expert attached to CILSS. While these actions hold promise, generally speaking, Sahelian leaders and many donors reportedly remain reluctant to recognize that rapid population growth may be an obstacle to achievement of development goals and that action to slow growth might be beneficial.

In addition to the general recommendations presented in chapter 11, we therefore recommend that the Administrator, AID, in participating in the Sahel development program:

- Incorporate considerations of population growth-development interrelationships as an explicit part of AID's plans and projects and work with other donors and the Sahelian nations to insure that the multinational planning effort includes such considerations.
- Vigorously pursue AID's demographic project within the Club/CILSS context to provide sound analysis of the impact of these interrelationships and develop a capability in Sahel to undertake such studies and utilize results in planning for social and economic development.
- Provide and encourage support for projects that are associated with reduced fertility, where it is determined lower growth rates are desirable. (See also recommendation 4 on p. 90.)
- Encourage adoption of family planning in the context of maternal and child health programs and other programs as appropriate.

## CHAPTER 9

### LIMITED PAST EFFORTS BY AID TO INFLUENCE

#### POPULATION GROWTH THROUGH DEVELOPMENT

AID's emphasis during its first 12 years of population assistance was on making family planning services available. In the countries we visited for this review, we found that there has been little effort by AID to influence population growth through development assistance programs.

As part of our work, we attempted to identify development assistance programs that are associated with lowered fertility. We found several innovative approaches to the population problem, as discussed in chapter 4; information on the potential for reducing fertility through such programs as increased female employment, female education, and income, as discussed in chapter 6; and indications of fertility impact that were not adequately documented in programs such as the Rural Electrification Project (below) in the Philippines.

We found that AID had not taken the initiative to build fertility measurement criteria into projects in the development assistance areas believed to have fertility reduction potential. AID officials recently pointed out that the state of knowledge about fertility determinants does not provide much in the way of useful guidance at country-specific and project-specific levels. Thus, overall, on a country-specific basis, there is lack of information on how and the degree to which various categories of development assistance affect fertility and on the proper mix of assistance projects for maximum fertility impact. In regard to this problem, Population Council officials pointed out in July 1977 that knowledge could best be obtained by local country experts working, collecting, and analyzing data on pilot or normal development projects.

We found that opinions at AID missions differed on how and the extent to which development projects affect fertility and on the measures that should be taken to obtain fertility impact information related to development projects. For example, at one mission we were told that the cost of the analysis for a development project population impact statement would make such a statement impractical. The mission in Pakistan, however, has required such a statement on all new projects since January 1976. At another mission,

we were told that most of the projects, such as rural electrification and road construction, would appear to have little interrelationship with the population effort. The Rural Electrification Project in the Philippines, however, is thought to have had an impact on birth rates.

We believe that these circumstances, along with the more detailed information below, reveal the need for strong AID initiatives and leadership directed toward achieving a knowledge base that facilitates a unified and informed Washington/field approach to the population problem.

LIMITED EFFORTS IN SELECTED AFRICAN,  
ASIAN, AND LATIN AMERICAN COUNTRIES  
TO INFLUENCE POPULATION GROWTH THROUGH  
DEVELOPMENT ASSISTANCE PROGRAMS

In examining aspects of the Sahel development program, we noted that population growth and development inter-relationships were not adequately considered. We found no agreement as to the impact of rapid population growth on achievement of development goals. Unlike other countries we visited, the Sahelian countries have not recognized reduction of population growth rates as a beneficial objective. The population growth rate is, generally, not considered a variable. For example, the program goal of food self-sufficiency focuses on changing the amount of food produced in the future, not changing the number of people to be fed. (See ch. 8.)

AID officials in Senegal, Mali, and Upper Volta told us that the lack of adequate Sahelian demographic studies would hamper their determination of how development projects might affect fertility. Even though they had not assessed the demographic implications of their projects, the AID officials believed most of their projects were of the type intended by what is now section 104(d) of the Foreign Assistance Act.

They pointed out, however, that in some cases projects that might encourage smaller family size could conflict with existing requirements. AID officials in Senegal cited, as an example, its Senegal women-in-development project, proposed for the fiscal year 1978 program as a \$3.6 million 3-year project. That project was designed to assist the Government of Senegal in its programs to integrate women into the productive economy, with improved social and economic status, so that they could participate fully in the nation's development. It included:

- Commercial and secretarial training.
- Village economic activities for women.
- Intermediate technology equipment in villages.
- Expansion of the John F. Kennedy Girls' Lycee in Dakar.

In January 1977, however, AID headquarters in Washington disapproved the commercial secretarial training and expansion of the John F. Kennedy Lycee sections because they were aimed at the urban nonpoor rather than poor rural women. The AID mission felt these two sections were of the type envisioned in the proposed section 104(d) but said they were told by AID headquarters they were not in line with the congressionally mandated emphasis on the rural poor.

In Ghana, the government has recognized that its population growth is impeding efforts to improve the quality of life and the government has a population policy. Little progress has been made, however, in affecting fertility through development. An AID supported project in Ghana, the Danfa Rural Health and Family Planning Project, indicates that more women accept family planning in the context of health programs. Another project built on the premise that development must be locally based is the Ghana Rural Reconstruction Movement Project in the Mampong Valley. These projects are discussed in chapter 4.

While family planning programs in several Asian countries have achieved a higher degree of success than in other parts of the world, the program in Pakistan has met with relatively little success, even though it is one that has had large amounts of financial assistance over a long period of time, as discussed in chapter 3. Pakistan is one country, however, for which AID recently provided limited assistance to the government to expand its approach to the population problem. This assistance, which included sponsoring consultants who analyzed the probable demographic impact of actions contemplated in connection with the country's 5-year plan, is discussed in chapter 4.

In Thailand, AID assistance to the population program has been mainly in the supply of contraceptives and clinical equipment (medical kits for intrauterine device insertions or for sterilizations). AID has also supported training, programmatic research, and tests of complementary (government and commercial) channels for contraceptive distribution.

According to AID officials in Indonesia, there is no AID mission policy or effort to interrelate population and socioeconomic programs. However, the program officer noted that mission personnel are well aware of the possible interrelationships and this aspect is kept in mind as projects are developed. It was also noted by AID mission officials that most of the mission projects are regional in nature and would therefore not be as cost effective or have the opportunity for impact as would a nationally oriented project. The mission director noted that AID's contribution to Indonesia's development is too small to have any significant impact on population efforts.

In Sri Lanka, where a significant decline in population growth has been experienced even though no bilateral AID population assistance has been provided, successive government administrations have implemented a number of programs designed to provide social benefits to the population. These programs have included food and transportation subsidies, free education and health services, land reform, and fiscal policies (tax restructures). These programs were designed to improve the general quality of life and are thought to have indirectly reduced fertility by affecting some of the more important socioeconomic determinants of fertility--income, status of women, age at marriage, and infant mortality. Socioeconomic factors believed associated with fertility decline are discussed in chapter 6.

In the Philippines, both the government and AID recognize the potential for using development to influence fertility. There had not, however, been conscious planning or use of relevant development efforts to reduce fertility. Nor has the impact of development on fertility been monitored or evaluated by the government. Also, the AID mission is moving very slowly in implementing AID's future directions policy which advocates stronger efforts to reduce population growth through development. The mission's expertise is limited and baseline data for fertility analysis has not been accumulated as part of project design. The mission's Development Assistance Program dated June 1975 stated that to change the demand for children would require a better understanding of fertility in the Philippines. Thus, criteria for selecting future projects and for assessing the impact of development programs on fertility have not been developed.

The President of the Philippines has stated that the goal of all of that country's development programs is to improve the quality of life and that family planning and development should play complementary roles in achieving this goal.

Reliable information is needed, however, on Philippine fertility determinants to plan and implement programs consistent with AID's new population policy. Completed research in the Philippines has identified certain relationships between fertility and female education, employment and work status, family income levels, and female age at marriage. The scope of the research is extremely limited and based on unreliable national statistics. There are, however, major efforts in the Philippines to continue research into fertility behavior and strengthen the data base for fertility analysis.

In one instance, an AID mission-supported development project in the Philippines had been evaluated to determine its general impact on fertility. The Misamis Oriental Electric Service Cooperative began at the request of the government in 1967 with a feasibility study by AID and the National Rural Electric Cooperative Association. In September 1971, the first section of the system was energized and the cooperative now serves more than 7,000 members in the western segment of Misamis Oriental Province. The northern part of the province remains nonelectrified.

In 1976 the Research Institute for Mindanao Culture, Xavier University, completed a survey of the social and economic impact of electrification in rural western Misamis Oriental. According to the Xavier University report, little doubt exists that birth rates have declined since establishing rural electrification. Although other factors, including sampling error, could have accounted for the reduction, the report indicated that rural electrification may have played a part in the decrease.

The researchers recognized that delayed marriages had contributed to the fertility decline. They believed that electrification in western Misamis Oriental Province may have provided for the participation of young females in the labor force, which may have delayed marriage. The report observed that many Third World demographers and others argue that fertility decline will not take place until development projects significantly affect common people and until genuine improvements begin to appear in their social milieu. The finding of lower fertility among users of electricity was, therefore, considered important enough to be followed up by additional research.

The report concluded that fertility was highest in households below subsistence income levels. Such a finding suggests that contraceptive supply programs have a greater

impact on those families whose total income exceeds minimum levels. This was thought to be the most important finding of the Xavier study.

The report cautioned that because of the initial sample size, the correlation of fertility and family income levels needs to be researched further. A population planning project paper, approved by the AID Administrator on August 30, 1977, included provisions for a followup study by Xavier to investigate the rapid fertility decline in specific municipalities of the Misamis.

In Latin America, we visited Colombia and El Salvador. In Colombia, AID mission officials stated that because of the phaseout status of the mission, not very much could be done to address the integration of population and development assistance. Some development projects, however, such as the Small Farmer Training Program, have considered the population issue in some way.

In El Salvador, where AID's assistance has played a key role in creating an increased awareness of population matters, no specific efforts have been made to analyze the development assistance program in terms of its probable demographic impact. Except for the population sector, potential demographic impact and population/development interrelationships have not been a consideration in the formulation of projects. The mission's "Development Assistance Paper," however, discusses in some detail the problem of rapid population growth as a factor in the country's major economic and social problems.

The mission's current population and family planning efforts are basically the same as in the past--to educate and to distribute supplies and materials. The focus of the program is to make contraceptive technology available to all segments of the population. The mission, however, recognized the need to support and work toward integrating population and development assistance in a June 1977 population strategy paper.

## CHAPTER 10

### PROBLEMS OF IMPLEMENTING THE FUTURE DIRECTIONS POLICY

The implementation of the new section of the Foreign Assistance Act and AID's future directions policy appears to be facing several impediments or constraints. These are:

- Restrictions on the availability of funds to accumulate, assimilate, analyze, and interpret relevant information needed for policy formulation and for the difficult and complex task of selecting and designing the most feasible and effective development projects affecting fertility.
- Restrictions on the availability of staff resources with expertise on population matters to become involved in the policy and project selection and development processes.
- Limitations on AID's ability to influence the impact of development on fertility in countries where AID has no bilateral programs.

### AID'S PROGRAM APPEARS TO HAVE BEEN INFLEXIBLY STRUCTURED AND FOCUSED ON FAMILY PLANNING SERVICES

Historically, AID's population program, as authorized by title X of the Foreign Assistance Act, has emphasized and has been organized to provide family planning services, on request, to less developed countries. The Office of Population oversees the entire population program and has controlled or strongly influenced all of AID's personnel with population expertise and the use of the appropriated population funds.

For some time the Agency has considered a reorganization. On August 31, 1977, the Administrator announced plans to move ahead with some initial reorganization. Subsequently, the Technical Assistance Bureau and most of the Bureau for Population and Humanitarian Assistance were merged into a new Development Support Bureau. Under the broad plan, population planning was to continue as an operational unit in the Development Support Bureau but with greater emphasis on strengthening the population program as it relates to other disciplines, such as health, nutrition, and rural development.

Some population personnel were to be transferred to regional bureaus to strengthen project design capability.

The AID analysis described in chapter 5 recommended increased levels of title X funding (to about \$200 million a year) but these were for increasing efforts in the six goals of the population and family planning assistance program. (See ch. 2.) Among other changes, this would provide for exploration of the link between fertility and the development process and for "piggy backing" of family planning components in education, health, nutrition, rural development or other programs. (See recommended new directions in the title X program, ch. 5.)

According to the AID analysis, non-title X programs in food and nutrition (and broader rural development), education, and health can affect fertility indirectly but significantly. Except possibly for low cost health systems that include integrated population services, the primary objectives of these programs do not include fertility reduction, though that may be a secondary result. The analysis made specific suggestions as to how these programs should be focused to maximize the impact on fertility and emphasized the need for additional developing-country-based research in that area. (See ch. 5.)

The new policy states that non-title X funds can be used to explore links between fertility and development and to assist in planning, implementing, and evaluating programs designed to affect fertility, and it asserts that these other forms of AID assistance and Public Law 480 funds will have to be used to accomplish social and economic changes that will create the desire for smaller family size. It contains restrictions on use of title X funds for development programs that do not have fertility reduction as their principal objective.

While there is population expertise at many missions overseas, we noted that virtually all of the population staff in Washington was assigned to the Office of Population. Therefore, AID's regional bureaus responsible for planning, programming, and implementing development projects had to look to the Office of Population for expertise in efforts to interrelate population and development. For example, when it became apparent that population aspects of the Sahel development program were not being addressed and when questions were raised as to the need for AID to include such considerations in the program, there was a need to assign personnel with population expertise to the program.

However, qualified personnel for assignment to this work were apparently not available either in the AID missions in the Sahelian countries or in AID's African Bureau in Washington, and a technician from the Office of Population was transferred to the African Bureau to fulfill this need.

We discussed these apparent problems with the Director of the Office of Population and with other knowledgeable AID officials. Their views are described below.

Comments of AID officials concerning organization and funding problems

The Director of the Office of Population does not perceive the use of development projects to influence fertility as part of his office's population program. He said that he would welcome such efforts and would be happy to see other AID organizations implement them. However, he feels fertility reduction objectives would be only a secondary objective of the projects and he is pessimistic as to their ultimate impact on fertility.

The Director also reiterated his view that the availability of contraceptives is the most important factor in reducing fertility. He considers four factors to be critical to the solution of population growth problems of developing countries: (1) the elimination of teenage pregnancies, (2) delayed marriages, (3) full availability of contraceptives, and (4) social and peer pressures against large families.

When we discussed a draft of this report with the Director and his staff in December 1977, a great deal of skepticism was expressed about the benefits and cost effectiveness of efforts to influence fertility through development programs that seek to change social and economic conditions. It appears, therefore, that the Director of the Office of Population would not fully support the use of title X funds and personnel of the Office of Population for researching, designing, and planning such efforts.

The Deputy Assistant Administrator of AID's Bureau for Program and Policy Coordination told us that the Bureau has focused on the integration of population and development assistance because there is no AID organizational entity outside the Office of Population that could assure that population and development are appropriately integrated.

He said that basic responsibility for implementing development projects to influence fertility will rest with AID's regional bureaus and their missions abroad. However, a small Washington office will be needed to provide guidance, technical assistance, and support. The Deputy Assistant Administrator told us that additional funds for research would be needed and that funds would also be needed at the mission level for project implementation.

Another official from AID's Bureau for Program and Policy Coordination expressed the belief that responsibility for the policy's implementation should be assigned to a specific AID organization. That official mentioned several arrangements, as alternatives to the Office of Population, that might be used. These were (1) a special office to be established in the Bureau for Program and Policy Coordination, (2) another office to be established within the Bureau of Population and Humanitarian Assistance, <sup>1/</sup> or (3) an office to be established within the Technical Assistance Bureau. <sup>1/</sup> What this official envisioned was a small office that would assign individuals to be responsible for policy implementation, including related research, in each of AID's four geographic areas. Other staff would seek new initiatives for application of the policy. The official recognized that this was a modest organizational concept and expressed the view that all personnel in all of AID's bureaus should be concerned with the policy's implementation, but that responsibility should be explicitly assigned to the new organization described.

Concerning the question of funding, the official from the Bureau for Program and Policy Coordination believes that about \$5 million would be needed for research in the first year of implementation and about \$5 million for "piggy-back" projects for that initial year. The size of that budget would increase to a high of about \$20 million by the mid-1980s. These funds would be separate from those authorized by title X, but some of the funds allocated to the Office of Population might be needed.

We also discussed the organization and funding problems with the Director of the State Department's Office of Population Affairs. He supports the view that resources authorized by title X should not be used to fund development projects.

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<sup>1/</sup>AID's November 1977 reorganization merged these two bureaus into a new Development Support Bureau.

However, he believes that there is an absence of adequate knowledge concerning the determinants of fertility and that additional funding will be needed for such study and research.

Another official from AID's Office of Population--the Director of that Office's Policy Development Division--told us that there are only a few people in AID's missions that are capable of performing the work involved in carrying out the future directions policy. He felt that there was also a need to develop more specific knowledge relating to the determinants and correlates of fertility and that more study and research on the subject is needed. Such study and expertise needs to be country-specific in his view and should be carried out at mission levels. He expressed the view that research funds available under title X would be adequate and could be used for these purposes. This official expressed the view that the future directions policy is complementary to the objectives of title X and that it could be made a responsibility of the Office of Population. He estimated that additional funds would be needed for staffing the function within that Office.

If the Bureau for Program and Policy Coordination is given responsibility in this area, the Director of the Office of Population's Policy Development Division would want that Bureau's role limited to policy promulgation, reviewing and reporting on implementation progress, and identifying AID-wide projects. However, the Office of Population would be the substantive technical office that would carry out research and provide staff expertise.

There is a divergence of views within AID as to the use of funds authorized by title X (see pp. 3 and 4) for the purposes of section 104(d). While the language of title X does not specifically address the type of activities envisioned by section 104(d), we believe that the funds authorized by that title can and should be made available for the planning and programing of such activities and for related research.

#### Comments of AID mission officials concerning policy implementation

Many AID missions have expressed their desire to cooperate in implementation of the new policy. The missions are concerned with the work level implicit in its implementation and have expressed a need for data that would assist them in developing and carrying out its intent.

Officials in Senegal, Mali, and Upper Volta said that they did not have the staff expertise to prepare meaningful population impact statements for development projects. It was suggested that a population/demographic expert might be assigned to the regional support office to assist the missions or that experts might be assigned to the missions for short periods.

In the Philippines most AID mission officials outside the family planning sector were not familiar with AID's 1976 future directions circular. We were told that funds were not available for developing adequate baseline data to gage project results. However, the mission has proposed funding an economic and social impact analysis project in fiscal year 1978 to research the economic development progress and the factors affecting the costs and relative success of development activities.

Mission officials in the Philippines believe that a population impact analysis would be valuable in evaluating development projects. They cautioned, however, that the usefulness of impact analysis would depend greatly on mission staff expertise and the adequacy of the project data base.

The AID mission in El Salvador stressed the need for increased training for staff not directly involved in population programs.

HOW AID CAN INFLUENCE FERTILITY  
THROUGH DEVELOPMENT IN COUNTRIES  
WHERE IT HAS NO BILATERAL ASSISTANCE  
PROGRAMS

There are a number of countries with serious population growth problems in which the United States does not have AID missions or bilateral programs. For example, there are no AID missions in Mexico, India, and Brazil, and, in other countries such as Colombia, the mission is "phasing out."

In many of these countries, the United States has provided population assistance through intermediaries. AID has provided funds to international private sector organizations, such as IPPF, and to multilateral organizations of the United Nations through its contributions to UNFPA. These were title X funds centrally controlled by AID's Office of Population, and, in the past, they have been used principally to provide family planning assistance.

We believe that there is a need for development activities in these countries to focus on optimizing their impact on fertility. Since AID's future directions policy does not address this need, we believe that attention will have to be given to assuring that U.S. population assistance and other assistance to intermediaries involved in development and family planning activities in these countries is also directed toward influencing fertility through development.

## CHAPTER 11

### CONCLUSIONS AND RECOMMENDATIONS

The world population has quadrupled from about 1 billion in 1830 to over 4 billion. At the current growth rate, the world population could double in less than 40 years.

About 70 percent of the world's inhabitants live in developing countries, and it is in these countries that growth rates (the difference between birth and death rates) are the highest. This rapid growth has adversely affected the availability of food, education, and health services; it has increased unemployment, depleted natural resources, and it has led to political and civil disorder.

U.S. economic assistance programs, as administered by AID, seek to improve the level of well-being of the people of developing countries, particularly the rural poor, by helping to increase the supply of goods and services, supporting their equitable distribution, and (through family planning programs) limiting the number who must share.

Voluntary fertility reduction has been among the more important means encouraged by AID for achieving individual well-being in developing countries. This program, authorized by title X of the Foreign Assistance Act and overseen by AID's Office of Population, has for the past 12 years focused mainly on making family planning services and information available.

About \$1 billion has been made available for AID's population programs. A major part of these funds has been used to support family planning and related programs of the United Nations, private international organizations, and universities that are dealing with population problems of developing countries. These funds have also been used by AID missions abroad to provide support to the family planning programs of the governments of the developing countries.

Although this report is not a chronicle or an evaluation of the performance of AID's Office of Population, the efforts of that office have contributed significantly to increasing world awareness of population growth problems and to making progress in lowering birth rates. In calling for the integration of population and development assistance to influence fertility, this report is not implying that the family planning activities of AID should be reduced or discontinued. However, we believe it is now time to restructure

U.S. development assistance programs, as appropriate, in ways that encourage smaller families. Such a new direction would enhance AID's ability to help slow world population growth.

## CONCLUSIONS

The impact of family planning assistance, started on a mass scale in the late 1960s, is difficult to assess. Although there has been progress, growth rates have not fallen fast enough to stabilize world population at desirable levels. (If current trends continue, according to the World Bank, replacement level fertility may not be reached until 2020, which could lead to a stabilized world population of 11 billion.) Despite the increasing availability of family planning services, such services are now available to less than half the women in developing countries (excluding the Peoples' Republic of China) according to the Office of Population. The possibility of achieving population stability through the provision of family planning services alone, however, is being questioned by many authorities.

Most family planning experts believe that population stability would require contraceptive use by about 60 to 70 percent of the reproductive-age women. We did not, however, find prevalence approaching this magnitude in any of the developing countries we visited.

AID has stated that family planning programs and information alone may not bring birth rates in developing countries down to target levels and that reductions in average family size may be achieved faster when family planning services and information are provided in association with appropriate development policies and programs. Other authorities have also recognized the limitations of family planning programs in the absence of social and economic change and have advocated development programs that encourage smaller families as a means of reducing fertility.

An increasing awareness of the need for social and economic change that would make smaller families more desirable was manifested in international forums such as the 1974 World Population Conference and the 1975 Women's Year Conference. Indeed the dominant theme of the World Population Conference was development. The general consensus was that population policies should be an integral part of development policies. The U.S. position at the conference was that both rapid social and economic development and strenuous population policies and programs were required to bring growth rates into balance with the rate of economic and resource development.

Despite the widespread recognition of the need to interrelate and integrate development and population assistance to developing countries, AID appears to have segregated these forms of assistance. As previously stated, its efforts to provide population assistance have focused mainly on providing family planning services and information, although there have been instances when such services have been provided in conjunction with health, nutrition, and related programs. We found, however, that AID has made little effort or progress in the use of development programs to influence fertility.

A recent AID analysis of the Agency's population effort resulted in a shift in its policy toward greater emphasis on achieving fertility reduction through social and economic change. This future directions policy, announced in July 1976, recognized an approach involving exploration of the links between fertility and development, and sharply increased attention to the potential impact of other development programs and policies on fertility. This was characterized as a broader and more ambitious approach and a substantial change in AID program emphasis.

Moreover, AID was instrumental in the inclusion in 1977 of section 104(d) in the Foreign Assistance Act of 1961, as amended. That section requires the identification of the potential impact of development assistance projects on fertility. The section requires that appropriate development projects be designed to reduce fertility and authorizes studies of this complex subject.

While AID plans more effective integration of population and development programs in an attempt to make family planning more acceptable and appealing, the Agency's new policy and the provisions of section 104(d) have yet to be implemented.

AID has not given sufficient emphasis to developing knowledge of the determinants of fertility, and not enough is known about fertility-influencing factors to plan the country-specific mix of projects that would contribute most to fertility reduction goals. In addition, the limited research on the subject in the past is considered to have been somewhat "academic bound" and to have depended too much on the researchers to provide what AID wanted. It is now time for AID to assess actual development projects for their impact on fertility and to conduct fertility surveys in conjunction with pilot projects.

The United States is involved in a multibillion dollar, multidonor, long-range program to develop the Sahel. AID said in early 1977 that a \$10 billion, 10- to 15-year program was envisaged, with the U.S. share totaling \$1 billion to \$2 billion. <sup>1/</sup> The program illustrated the need for more aggressive AID efforts to interrelate population and development activities. We found that in general the multinational Working Group teams and others involved in drafting development strategies were not giving adequate attention to the implications of population growth for achievement of development goals or to the impact that development could have on fertility. When we brought the matter to AID's attention, it advised us of plans to intensify efforts to promote better understanding among field missions, fellow donors, and Sahelian leaders of the wide range of activities included under the heading "population," and the relationship of these to the total development effort.

Potential impediments or constraints to the effective implementation of AID's future directions policy have been identified. There is no organization in AID specifically dedicated to dealing with efforts to lower fertility through development nor are there any financial resources specifically appropriated for such projects. It is not yet clear how the proposed Agency-wide reorganization plan, discussed in chapter 10, will affect these impediments

Resources for the population program in AID are those authorized by title X, and these have been allocated to deal primarily with the provision of family planning services to developing countries. Historically, the Office of Population has overseen the entire population program and controlled or strongly influenced all of the Agency's personnel with population expertise and the use of appropriated population program funds.

Discussions with officials in AID led us to believe that these circumstances may result in restrictions on the availability of funds and personnel needed (1) to obtain and effectively utilize relevant information needed for guiding AID's efforts to affect fertility through development and (2) to assure that the most feasible and effective development projects affecting fertility are undertaken.

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<sup>1/</sup>The Foreign Assistance and Related Programs Appropriations Act, 1978, limited the U.S. share to a maximum of 10 percent.

Another problem that will require AID's attention is to find ways of assuring that U.S. resources provided to intermediaries involved in development and family planning activities are used to the extent feasible to affect fertility through development.

AID's limited past efforts to interrelate its development and population assistance efforts and to develop a body of useful knowledge on the relevant linkages, despite opportunities to do so, indicated a need for more dynamic leadership within AID, dedicated to changing social and economic conditions to affect fertility in developing countries.

We believe that the past history of AID's population assistance efforts and the views of officials that have directed and implemented those efforts clearly show that responsibility for the effective implementation of AID's future directions policy must be placed within an organizational structure and under leadership dedicated to the integration of population and development assistance and to the greater involvement of the regional bureaus and field missions in these matters. It is our view that AID must take such actions if it expects to effectively implement the requirements of section 104(d).

We recognize that these activities are complex and that their impact on fertility may not be realized in a short time. It is therefore important that AID move ahead expeditiously with an integrated approach to efforts to slow population growth.

Resources must be applied to carry out analyses and to help plan projects needed to achieve fertility reduction goals through development. Moreover, all impediments to securing appropriated population funds and agency expertise for these purposes need to be specifically identified and eliminated. We also believe that the development and utilization of mission level expertise is essential to the success of such an expanded approach to the population problem.

#### AGENCY COMMENTS

We gave a draft of this report to the Secretary of State and the Administrator, Agency for International Development, on November 17, 1977, for their comments.

We later held a number of meetings with AID officials to discuss the draft report. These officials provided

us with updated information and suggestions for clarification. As a result of this dialogue, we modified the report as we deemed appropriate. On December 21, 1977, we provided AID officials with a revised draft.

In February 1978 the Agency Auditor General, on behalf of the Administrator, provided AID's formal response. (See app. VI.) AID basically agreed with the principal thrust and conclusions of the report. It also described recent actions initiated or planned to broaden AID's population program. These actions are in accord with the views expressed in this report and the requirements of section 104(d) of the Foreign Assistance Act of 1961, as amended.

Department of State officials agreed with the substance of the report and verbally advised us that they did not see a need to respond to it in writing.

### RECOMMENDATIONS

We believe AID's initiative in proposing legislation which the Congress enacted in 1977 with modifications as section 104(d) of the Foreign Assistance Act, as amended, was an important step toward more effectively meeting fertility reduction objectives. However, it is our view that action must be taken to remove or mitigate the effects of the implementation constraints identified in our review. Accordingly, we recommend that the Administrator of AID, in conjunction with reorganization plans now underway:

1. Establish an organizational structure in the Development Support Bureau to provide leadership and to coordinate all categories of assistance designed to lower fertility in developing countries. This structure should provide for family planning and other types of assistance now administered by the Office of Population and for intensive participation in designing and evaluating the development activities envisioned by section 104(d). The Administrator should also assure that positions of leadership and those with responsibility for social and economic activities are staffed by personnel who will provide inspiration and direction to AID's efforts to achieve fertility reduction goals through social and economic change.

2. Identify and seek to eliminate any intra-Agency restraints on the availability and effective use of resources needed to carry out policy-relevant analyses and to help plan projects to achieve fertility reduction goals through social and economic change.

3. Establish within the regional bureaus and at the mission level, where appropriate, a capability to identify programs and projects that could contribute to lowering fertility and to work with the Development Support Bureau population office to design and implement such projects.

4. Require that gaps in knowledge concerning determinants of fertility be identified in order to develop a comprehensive outline to guide efforts to obtain needed data. On the basis of the outline, require the regional bureaus, in conjunction with the population office, to:

--Assess completed development projects believed associated with lowered fertility.

--Build demographic reporting requirements into selected development projects.

--Support field pilot studies in instances where knowledge gaps exist.

The purpose of these activities would be to develop knowledge, methodologies, techniques, etc., for effective country-specific planning of fertility-influencing projects.

5. Encourage discussions within international organizations and private and voluntary organizations engaged in development or population activities to influence their participation, to the extent feasible, in efforts to reduce fertility through development. Such private and multi-lateral efforts should include encouragement of developing countries to incorporate fertility reduction objectives in social and economic development plans, particularly in countries in which AID has no bilateral population assistance programs.

Recommendations pertaining to the Sahel development plan are listed on pages 69 and 70.

RECIPIENTS OF AID POPULATION PROGRAM ASSISTANCE  
FUNDING ALLOCATIONS IN THOUSANDS (note a)

Fiscal Year 1965 Through Transition Quarter, 1976

	1965-68	1969	1970	1971	1972	1973	1974	1975	1976	Transi- tion Quarter	Total 1965-76 TQ	Per- cent
Private Voluntary Organizations												
IPPF	4,478	5,964	7,300	5,000	8,000	12,104	12,747	12,437	7,794	3,134	78,958	9
Pathfinder Population Council	1,494	4,359	-	3,066	4,350	6,735	4,001	3,660	3,622	394	31,681	4
AVS (note b)	3,104	7,487	2,435	4,247	5,525	7,280	-	750	800	-	31,628	4
FPIA (note c)	-	-	-	-	876	1,000	1,250	1,850	1,000	-	5,976	1
Other PVO's	421	458	6,868	3,000	4,000	-	3,730	4,424	6,329	1,352	23,635	2
Subtotal	9,497	18,268	16,603	6,241	13,542	9,469	6,654	8,204	7,897	3,095	62,849	7
				22,354	36,293	36,588	29,382	31,325	27,442	7,975	234,727	27
Universities:	8,014	3,797	6,494	23,559	14,741	14,100	11,430	10,672	15,036	4,098	111,941	13
Participating Agency Service Agreements	419	2,585	1,301	1,883	2,911	3,767	3,667	3,772	3,086	659	24,050	3
Bilateral Programs	22,942	13,778	39,635	25,267	34,230	47,588	33,617	30,319	37,800	14,358	299,554	35
UNFPA	500	2,500	4,000	14,000	d/29,040	d/9,000	18,000	20,000	16,000	4,000	117,040	13
Other (note e)	2,890	3,432	5,070	6,892	3,636	10,582	5,049	3,887	3,628	1,378	46,444	5
AID Operational Expenses (note f)	959	1,084	1,469	1,893	2,414	3,929	12,300	10,000	-	-	34,048	4
TOTAL	45,221	45,444	74,572	95,868	123,265	125,554	112,445	109,975	102,992	32,468	867,804	100
a/Data provided by AID												
b/Association for Voluntary Sterilization.												
c/Family Planning International Assistance.												
d/According to an AID official, the sharp increase in 1972 and drop in 1973 resulted primarily from obligating for the U.S. share (about 50%) of the anticipated UNFPA calendar year 1972 budget. Actual contributions were not as large as anticipated however, a portion of the 1972 obligation (about \$10 million) was used to reduce the amount of the obligation for the 1973 contribution.												
e/Includes Pan American Health Organization, Salk Institute, Latin American Demographic Center, Latin American Center for Studies of Population and Family, Management Services for Health, Incorporated, and General Electric Company.												
f/AID operational expenses were funded out of a separate appropriation beginning in FY 1976.												

AID POPULATION AND FAMILY PLANNING PROGRAM ASSISTANCE

ALLOCATIONS IN MILLIONS BY GOAL AREAS (note a)

Fiscal Year 1965 Through Transition Quarter, 1976

	1965- 67	1968	1969	1970	1971	1972	1973	1974	1975	1976 Quarter	Transi- tion 1965- 76	Per- cent 1977	Estimate 1978
Development of Adequate: Demographic Data	.9	2.6	4.1	4.5	7.7	9.8	9.1	11.6	11.9	9.2	3.6	9	10.6
Population Policies:													
Policy Development	.7	.6	1.3	2.8	1.0	2.1	1.4	.7	1.0	1.8	.4	13.7	2
Social Science Research (note b)	.7	.9	.9	1.5	4.4	7.7	3.5	2.2	3.6	2.3	.3	28.8	3
Means of Fertility Controls:													
Biomedical Research	.2	.2	6.0	8.2	6.8	11.5	5.6	3.4	4.2	5.8	1.0	52.8	6
Operational Research (note c)	.7	1.3	1.1	7.8	3.2	1.6	2.0	1.7	1.4	2.8	.5	24.0	3
Family Planning Services: Contraceptive Commodities (note d)	-	1.1	4.1	4.1	3.7	7.0	16.1	21.9	26.0	30.5	14.6	149.0	17
Service Programs	4.3	17.8	16.6	30.3	33.0	45.4	25.8	29.1	27.0	25.2	5.3	259.8	30
Information Programs	.2	2.0	3.9	4.2	10.8	17.3	16.3	14.0	13.0	12.0	2.6	96.5	11
Manpower and Institutions: Training Institutional Development	.9	2.1	2.7	7.2	15.9	10.0	15.3	12.5	8.8	10.7	3.1	87.1	10
Operational Expenses (note h)	.5	.4	1.1	1.5	1.9	2.4	3.9	12.3	10.0	-	-	34.0	4
Total	10.5	34.8	45.4	74.6	95.9	123.3	125.6	112.4	109.9	103.0	32.5	867.7	100

a) Data provided by AID. Figures rounded so subtotals may not add to totals.  
 b) Includes determinants of fertility research.  
 c) Studies of various methods of delivering family planning services to improve efficiency and effectiveness.  
 d) In June 1973, AID initiated a policy of central procurement of contraceptives, which is reflected in the changes between the fiscal year 1972 and 1973 figures.  
 e) Includes \$7.3 million contraceptive loan to Indonesia.  
 f) Includes \$3.3 million contraceptive loan to Philippines.  
 g) Includes \$8.0 million contraceptive loan to Indonesia and \$3.7 million contraceptive loan to Philippines.  
 h) AID operational expenses were funded out of a separate appropriation beginning in fiscal year 1976.

SUMMARY OF AID DOLLAR OBLIGATIONS IN THOUSANDS FOR  
POPULATION AND FAMILY PLANNING PROJECTS, (note a)  
FISCAL YEAR 1965 THROUGH TRANSITION QUARTER, 1976

	1965-69	1970	1971	1972	1973	1974	1975	1976	Transition Quarter (TQ)	Total 1965-76 TQ
<b>Project</b>										
<b>Nonregional</b>										
Office of Population										
Demographic Division	1,174	1,123	1,536	3,410	3,612	5,800	6,754	6,024	3,215	32,548
Population Policies Div.	1,995	2,845	1,971	5,376	2,712	553	1,743	1,537	695	18,927
Research Division	6,299	7,208	7,447	9,823	5,337	2,917	4,249	6,532	1,428	51,240
Family Planning Services Div.	14,766	6,917	13,073	24,096	37,093	37,991	40,619	45,475	10,092	b/230,122
Information-Education Div.	195	528	4,151	4,973	3,993	3,725	3,702	2,871	-	24,138
Training & Institutions Div.	6,018	3,897	7,735	7,578	7,175	6,561	2,348	6,022	2,140	44,424
Subtotal	<u>30,447</u>	<u>22,518</u>	<u>35,913</u>	<u>50,206</u>	<u>59,422</u>	<u>57,547</u>	<u>59,415</u>	<u>68,561</u>	<u>17,570</u>	<u>401,499</u>
Other AID Offices	210	304	1,524	1,856	1,068	1,481	1,246	1,195	408	7,294
AID Operating Expenses	2,043	1,469	1,893	2,414	3,929	12,300	10,000	-	-	43,342
U.N. Fund for Population	3,000	4,000	14,000	c/29,040	9,000	18,000	20,000	16,000	4,000	117,040
Activities	<u>35,700</u>	<u>28,291</u>	<u>53,330</u>	<u>83,518</u>	<u>73,419</u>	<u>89,328</u>	<u>90,561</u>	<u>85,656</u>	<u>21,978</u>	<u>561,861</u>
TOTAL										
<b>Country and Regional</b>										
<b>Africa</b>										
Country projects	1,410	2,484	2,084	9,008	7,596	4,071	3,862	4,569	564	35,648
Regional projects	746	179	5,699	2,259	3,556	334	1,262	1,161	12	15,208
Subtotal	<u>2,156</u>	<u>2,663</u>	<u>7,783</u>	<u>11,267</u>	<u>11,152</u>	<u>4,405</u>	<u>5,124</u>	<u>5,730</u>	<u>576</u>	<u>50,856</u>
<b>East Asia</b>										
Country projects	10,409	8,853	10,977	12,620	15,194	7,971	6,620	5,458	8,386	86,488
Regional projects	3,283	623	1,942	1,826	1,425	96	29	29	-	9,224
Subtotal	<u>13,692</u>	<u>9,476</u>	<u>12,919</u>	<u>14,446</u>	<u>16,619</u>	<u>8,067</u>	<u>6,649</u>	<u>5,487</u>	<u>8,386</u>	<u>95,712</u>
<b>Latin America</b>										
Country projects	10,067	5,437	7,085	7,223	6,230	4,792	4,238	2,776	563	48,411
Regional projects	12,585	5,520	8,161	3,911	7,393	2,655	1,430	1,366	865	43,886
Subtotal	<u>22,652</u>	<u>10,957</u>	<u>15,246</u>	<u>11,134</u>	<u>13,623</u>	<u>7,447</u>	<u>5,668</u>	<u>4,142</u>	<u>1,428</u>	<u>92,297</u>
<b>Near East and South Asia</b>										
Country projects	14,847	d/22,908	5,181	1,395	10,471	3,138	1,473	1,993	100	51,506
Regional projects	1,618	277	1,409	1,505	27	60	400	13	-	5,552
Subtotal	<u>16,465</u>	<u>23,185</u>	<u>6,590</u>	<u>2,900</u>	<u>10,741</u>	<u>3,198</u>	<u>1,873</u>	<u>2,006</u>	<u>100</u>	<u>57,058</u>
TOTAL	<u>54,965</u>	<u>4f 281</u>	<u>42,538</u>	<u>39,747</u>	<u>52,135</u>	<u>23,117</u>	<u>19,314</u>	<u>17,336</u>	<u>10,490</u>	<u>305,923</u>
GRAND TOTAL	<u>90,665</u>	<u>74,572</u>	<u>95,868</u>	<u>123,265</u>	<u>125,554</u>	<u>112,445</u>	<u>109,975</u>	<u>100,992</u>	<u>32,468</u>	<u>867,804</u>

a. Data provided by AID.  
 b. Includes contraceptive commodities supplied to programs in developing countries and loans for contraceptives.  
 c. According to an AID official, the sharp increase in 1972 and drop in 1973 resulted primarily from obligating for the U.S. share (about 50%) of the anticipated UNFPA calendar year 1972 budget. Actual contributions were not as large as anticipated, however, and a portion of the 1972 obligation (about \$10 million) was used to reduce the amount of the obligation for the 1973 contribution.  
 d. Includes special \$20 million grant to India for U.S. imports in order for the Indian Government to spend an equivalent amount for rupee local currency.

**SOCIOECONOMIC INDICATORS  
FOR SELECTED COUNTRIES**

Country	Population data				Socioeconomic data					
	Total population (note a)	Birth rates (note b)	Death rates (note b)	Growth rate (notes c,d)	Life expectancy	Population under age 15 (note c)	Per capita income	Population urban (note c)	Children in school (note e)	People per doctor (thousands)
<b>Africa</b>										
Chad	4.2	44	24	2.0	38	40	\$120	14	17	43.5
Ghana	10.4	47	20	2.7	48	47	460	31	45	11.7
Mali	5.9	50	26	2.4	36	49	90	13	13	38.9
Mauritania	1.4	45	25	2.0	38	42	310	23	10	16.8
Niger	4.9	52	26	2.7	38	43	130	9	7	43.0
Senegal	5.3	46	21	2.5	44	43	370	32	21	16.4
Upper Volta	6.4	48	26	2.3	38	43	90	4	7	60.2
<b>Asia</b>										
Indonesia	136.9	38	14	2.4	48	44	180	18	30	25.8
Pakistan	74.5	44	15	2.9	51	46	140	26	27	3.9
Philippines	44.3	35	8	2.7	58	43	370	32	65	2.7
Sri Lanka	14.1	28	8	2.0	68	39	150	22	58	4.0
Thailand	44.4	35	11	2.4	58	45	350	13	46	3.5
<b>Latin America</b>										
Colombia	25.2	33	9	2.5	61	43	550	64	f/63	f/60
El Salvador	4.3	40	8	3.2	58	46	450	39	44	4.1

a/Estimated million.

b/Per 1,000 people.

c/Percent.

d/At the growth rate shown, the population in these countries will double in from 22 to 35 years.

e/Percentage of children age 5-19 in school.

f/Children age 7-13 and percentage of population with access to curative health care.

Source: Except for the children in school and the people per doctor columns, this appendix was prepared using the 1977 World Population Data Sheet of the Population Reference Bureau, Inc. The population and socioeconomic data varies depending on the source. For example, other sources show growth rates of 2.9 percent for the Philippines, 2.2 percent for Thailand, 2.2 percent for Colombia, e<sup>c</sup>.

SAHEL DEVELOPMENT PROGRAMDROUGHT AND RELIEF EFFORT

The Sahelian nations of Chad, Mali, Mauritania, Niger, Senegal, and Upper Volta lie in a belt across Africa some 2,600 miles long. Inhabited largely by nomadic herdsmen and subsistence farmers, the region is one of the poorest in the world. Socioeconomic conditions are described in appendix IV.

In most of these countries, agriculture is the mainstay of the economy but is hampered by low and erratic rainfall and frequent droughts. During the 1950s and 1960s, generally average and good rains encouraged people to raise more cattle, which led to overgrazing and depletion of some good areas and to cultivation of marginal land. Growing population size led to increased urban demand for firewood, so more wood was cut. The long drought of 1968-73, with resulting crop failures and the spectre of human starvation on a large scale, underlined the fragile relationship between land and population in the Sahel. Although per capita income for all developing Africa increased from \$203 in 1972 to \$249 in 1974, in Sahel it rose only from \$118 to \$120 in the same period.

World attention to the problem sharpened in 1972: mass starvation was reported. National and international donors engaged in relief activities, 1/ in addition to regular programs.

The United States alone provided over \$230 million in emergency relief (primarily food) and rehabilitation assistance. AID estimated that as many as 100,000 people died from starvation and drought-related causes, groups were displaced, the basic wealth of the region (i.e. cattle and farms) was devastated, and export earnings fell. Pressures increased as population grew from 20.7 million in 1965 to about 27 million in 1976. Urbanization trends accelerated.

AID's involvement

Even while approving emergency aid, the Congress was urging U.S. agencies to take a lead in organizing an international development program. In fiscal year 1976, the Congress authorized \$5 million to start coordination and

---

1/We reviewed this relief effort in a report entitled "Need for an International Disaster Relief Agency" (ID-76-15), May 5, 1976.

planning and instructed the President to submit a comprehensive proposal to the responsible congressional committees by April 30, 1976. In this report, "Proposal for a Long-Term Comprehensive Development Program for the Sahel: Major Findings and Programs," AID noted two assumptions underlying the development program. They were:

- Without basic changes in production systems, the growing Sahelian populations would require even greater quantities of international aid just to survive.
- Given the underutilized resources (potential for dry land and irrigated agriculture), a transformation of these productive capacities would be possible if enough aid is provided.

Studies by the Massachusetts Institute of Technology and the U.N. Food and Agriculture Organization also concluded that it was technologically possible for the region, with external aid, to produce food for the population projected for the close of the Twentieth Century. 1/

#### Club du Sahel

The inaugural meeting of the Club du Sahel took place in March 1976, in Dakar, Senegal. The Sahelian states and major donors 2/ agreed to join in this Club, through which they would plan together to reach the goals noted on page 58. AID, under congressional guidance, has strongly supported a cooperative effort, as has the Chairman of the Development Assistance Committee of the Organization for Economic Cooperation and Development (OECD). Likewise, the Sahelian states individually and through their regional organization--The Permanent Interstate Committee for Drought Control in the

---

1/FAO used 1990, whereas the Massachusetts Institute of Technology used 2000 as the target years.

2/Some 12 donor nations and 28 international organizations, such as the United Nations and the Arab Bank for Economic Development in Africa, attended.

Sahel (CILSS), 1/ recognized the benefits of the Club mechanism.

At the March 1976 meeting, the Club agreed to create a Working Group under the chairmanship of the CILSS to prepare a medium- and long-term economic and social development strategy and program. At its first meeting in June 1976, the Working Group set up a matrix of nine teams 2/ to study productive sectors and cross-sector programs. There is also a synthesis team. Based on papers provided by the teams, the synthesis team prepared a strategy paper, which was approved by the CILSS council of ministers and, subsequently, at the second Club du Sahel meeting held May 30 to June 1, 1977, in Ottawa, Canada.

#### Assistance levels

According to AID, assistance by all donors to the Sahelian countries through the Club is planned at about \$1 billion a year by 1980. (Exact commitments of the various donors are not known, but AID officials stated that the U.S. share of assistance is planned at 10 to 15 percent and will be no more than 20 percent. 3/ This represents a major increase in aid. Assistance (noncommunist) to the Sahel in 1974, for example, totaled about \$755 million. Commitments for 1976, as prepared for the Club du Sahel by OECD staff, are shown on the following page.

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1/CILSS is an eight-country African organization established because of the drought. The Gambia and Cape Verde Islands now belong, as well as Chad, Mali, Mauritania, Niger, Senegal, and Upper Volta. CILSS became the major African group for coordinating and designing and, in concert with the Western donor community, planning for the subsequent relief, rehabilitation, and long-term development activities in the Sahel.

2/At the second Club du Sahel meeting in 1977 it was agreed to reduce the number of teams to six (agricultural production, livestock, fisheries, ecology, human resources, and transport). Each team is headed by a Sahelian representative; a donor representative and CILSS expert are rapporteurs. These individuals, plus two members each from the Club du Sahel and CILSS Secretariats, form a synthesis team.

3/See p. 87, footnote 1/.

	Amount (note a)	Percent of total
	(millions)	
France	\$236.79	28.0
European Economic Community	176.87	20.0
World Bank Group (note b)	103.00	12.0
OPEC countries (note c)	75.94	9.0
Germany	72.01	8.0
United States	39.59	5.0
African Development Bank	44.40	5.0
The Netherlands	35.00	4.0
Canada	32.77	4.0
United Nations/United Nations Development Program only	22.56	3.0
United Kingdom	12.71	1.0
Other DAC members	3.39	0.3
Switzerland	<u>3.12</u>	<u>0.3</u>
Total	<u>\$858.15</u>	<u>d/100.0</u>

a/Figures are tentative and incomplete

b/International Bank for Reconstruction and Development and International Development Association.

c/Organization of Petroleum Exporting Countries.

d/Total rounded.

AID assistance to the Sahel in fiscal year 1977 was provided through bilateral and regional programs. Beginning in fiscal year 1978, AID began funding increasing amounts of assistance through a special Sahel development program appropriation. These projects are those planned through the Club du Sahel. For fiscal year 1978, the Sahel development program appropriation was \$50 million. Appropriations for other Sahel projects were \$32 million that year; these are ongoing projects in areas in which AID is ahead of CILSS/Club du Sahel, such as family planning. The Foreign Assistance Act of 1961, as amended, authorized \$200 million, with no more than \$50 million to be appropriated in fiscal year 1978.

DEPARTMENT OF STATE  
AGENCY FOR INTERNATIONAL DEVELOPMENT  
WASHINGTON, D.C. 20523

FEB 17 1979

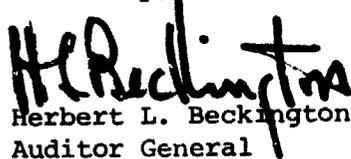
Mr. J. K. Fasick  
Director  
International Division  
United States General Accounting Office  
Washington, D. C.

Dear Mr. Fasick:

Thank you for providing the draft report to the Congress "Influencing Fertility Through Social and Economic Change in Developing Countries--A New Direction for U.S. Assistance" for Agency comment. Since receipt of your draft, a productive working relationship with your staff has resulted in the modification of portions of the report which we felt were in need of clarification and the inclusion of more current data in certain instances. This effort should contribute to a better understanding of the complex subject dealt with in your analysis.

The Agency is basically in agreement with the principal thrust and conclusions of the report. As indicated in our attached comments, this Administration has from its installation begun to implement policies aimed at these objectives.

Sincerely,

  
Herbert L. Beckington  
Auditor General

Attachments: a/s

Comments on the Draft GAO Report Entitled:  
Influencing Fertility Through Social and  
Economic Change in Developing Countries--A  
New Direction for U.S. Assistance

I. Basic Agreement

A.I.D. agrees with the principal conclusions of the report:

-- That over the years development programs managed by A.I.D. have not considered fully enough the possibilities for adaption which might stimulate reduced fertility over the longer run.

-- That future development programs should take such concerns into account whenever feasible so that family planning programs and other development efforts complement one another.

-- That the focus of A.I.D.'s population program on availability of supplies and services should be blended more vigorously and imaginatively into a broader program as part of an over-all developmental plan.

-- That increased levels of research on the social and economic determinants of fertility should be undertaken so that practical methods can be developed to stimulate the desire for smaller families.

-- That structural changes within A.I.D. should be made to create an ongoing means to continually stimulate such integrated planning, programming and research.

-- That efforts should be expanded to improve the data upon which fertility levels, contraceptive prevalence and other demographic factors are judged, thereby providing a better basis upon which to judge degrees of progress.

-- That A.I.D. should work with other public and private donor organizations to further these objectives.

II. Additional Major Points

The following points need to be considered so that the Report will be complete and there will not be misunderstanding about its basic thrust:

-- First, in early 1977 A.I.D. began a series of efforts relating to most, if not all, of the conclusions of the Report outlined in Section I above. Some of the key actions and new programs are listed below. While there may not have been time to describe those developments,

which occurred in most cases after the major portion of GAO fact-finding was completed in early 1977, but before discussion of the Report by GAO with A.I.D. officials, the picture is not current unless these developments are noted and unless it is seen how they lend support to many of the points put forth in the Report.

-- Second, as A.I.D. sees the challenge in the population field, the issue goes beyond the interplay of programs which emphasize availability and efforts to utilize other development programs to affect fertility. A.I.D. needs to emphasize more effectively programs that will directly enhance demand for family planning, as well as the longer-term vital components such as education, employment and the status of women. Examples of such short-term factors are the degree of strong commitment of national leadership in an LDC, utilization of mass media in ways that effect motivation, and the extent of community involvement. For example, Indonesia has shown that at least one large LDC can diminish the population growth rate prior to major impact of change in the longer-term social and economic milieu by combining widespread availability with strong national leadership and vigorous community organization.

### III. Recent Actions in A.I.D. to build a broadly-based program

As mentioned in Section II above, the present Administration of A.I.D. began, shortly after its installation, accelerated efforts to broaden the Agency's population program, with continued emphasis on availability and with added emphasis on stimulating increased demand for services through short-term programs as well as through stimulation of long-term conditions which can affect fertility. These efforts include:

#### A. Organization

As indicated in the GAO analysis the Agency was in the process of reorganization as the report was being completed. Thus, certain important details were not available until this time, but are nevertheless relevant to the present concern. Specifically:

-- Geographic Bureau technical staffs are being strengthened to include population specialists insuring the inclusion of this important perspective in the development of bilateral assistance program. These staffs will be supported by specialists in the Development Support Bureau (DSB)--both from the Office of Population and from other DSB technical offices when appropriate.

-- The Bureau for Program and Policy Coordination (PPC) has included instruction on the incorporation of population and fertility reduction facets in non-family planning programs in program policy guidance sent to field missions. PPC will also add a fertility determinants component to its inter-sectoral and economic policy research portfolio, supplementing efforts managed by the Office of Population in the Bureau for Development Support. DSB and PPC are working collaboratively on both of these matters.

-- The Bureau for Development Support (DSB) has created an internal structure which provides a focus for an inter-sectoral approach to fertility reduction which extends beyond the Office of Population. Through the creation of a Deputy Assistant Administrator for Human Resources Development, the principal inter-sectoral areas of health, education and population will be welded. Through senior staff dialogue on common problems, the Assistant Administrator of the Bureau is already beginning to focus this concern. The Assistant Administrator suggested the creation of a Health/Population/Nutrition Coordinating Group six months ago, even before the creation of the new DSB, and the new Bureau is pursuing such mechanisms to coordinate present and planned activities.

#### B. Efforts to Improve Data

-- The Bureau for Development Support through its Population Office's Demographic Division has recently initiated a project to collect data on prevalence of use of contraception. It is continuing support for the World Fertility Survey which is providing substantial data on the factors associated with fertility and fertility regulating behavior and for a project with the East West Center to assist countries of Asia and the Pacific Basin in the collection and analysis of data. It is also continuing assistance on the improvement of vital registration systems and census programs. A new project scheduled for FY 1978 funding will assist countries to carry out demographic surveys and a proposed FY 1979 project will focus on the special situation in Africa where institutions to collect and analyze data are less advanced than in other regions.

-- A project to assist countries with multi-purpose, multi-round surveys in response to Section 102(d) of the Foreign Assistance Act has been designed.

-- A.I.D. contracted with the National Academy of Sciences to evaluate data collection and analysis methodology, providing the demographic and development "communities" with an objective outside group for the resolution of problems.

### C. Policy and Planning

After a period of developing a methodology, the Agency initiated last winter and accelerated in 1977 a multi-year population program strategy effort aimed at intergrating all components of U.S. initiative into a logical framework for action--taking into account the efforts of the host country and other donors. In addition to initial efforts in Pakistan, El Salvador and Morocco, A.I.D. joined forces with the World Bank and the UNFPA to assure further collaboration of effort in Bangladesh.

### D. Donor Collaboration

In addition to the strategy effort in Bangladesh, A.I.D. took the initiative with the President of the World Bank, the Director of the UNFPA and the President of the Ford Foundation to stimulate policy level dialogue aimed at improved operational cooperation--particularly between the major donors. A.I.D. participated actively in a meeting in London hosted by the World Bank to consider the broad range of donor coordination mechanisms. A.I.D. has been engaged in a series of meetings with counterparts in the Bank to exchange ideas on population programs in specific countries including Pakistan, Philippines, Bangladesh, Egypt, Thailand and Mexico.

### E. Budgeting

During the recent internal Agency review of budget proposals prior to completion of the FY 1979 program request, now before the Congress, changes were made which placed additional emphasis on fertility determinants research and the concerns of section 104(d). Through the use of Zero Based Budgeting techniques, these programs were accorded higher relative priority than had been the case in the past. As a direct result of these reviews:

-- funds were approved during the last months of FY 1977 for ten socio-economic research projects on the determinants of fertility and a number of additional projects are being processed; and

-- almost \$3.0 million was added to the UNFPA contribution for 1977 in order to enable that organization to increase its initiatives in maternal/child health/child spacing activities in Africa.

F. Operations

Both adjustments of existing activities and new initiatives in addition to those mentioned above have been undertaken in recent months. For example the possibility of expanding the use of World Fertility Survey data and possibly the International Statistical Institute as a "wholesale" agent for such research in broader socio-economic and fertility determinants research is being explored.

PRINCIPAL AID OFFICIALS RESPONSIBLEFOR ADMINISTRATION OF ACTIVITIESDISCUSSED IN THIS REPORT

	<u>Appointed or confirmed</u>
<b>ADMINISTRATOR:</b>	
John J. Gilligan	Mar. 1977
Daniel Parker	Oct. 1973
John A. Hannah	Mar. 1969
<b>ASSISTANT ADMINISTRATOR, BUREAU FOR DEVELOPMENT SUPPORT (note a):</b>	
Sander Levin	May 1977
Allen R. Furman (acting)	Mar. 1977
Fred O. Pinkham	Apr. 1976
Allen R. Furman (acting)	Mar. 1976
Henry S. Hendler (acting)	Feb. 1976
Harriet Crowley (acting)	Feb. 1975
Jerald A. Kieffer	July 1972
<b>DIRECTOR, OFFICE OF POPULATION, BUREAU FOR DEVELOPMENT SUPPORT:</b>	
R. T. Ravenholt	July 1972
<b>ASSISTANT ADMINISTRATOR, BUREAU FOR AFRICA:</b>	
Goler T. Butcher	Apr. 1977
Stanley C. Scott, Jr.	Nov. 1975
<b>DIRECTOR, OFFICE OF SAHEL AND FRANCOPHONE WEST AFRICA:</b>	
David Shear	June 1974
<b>MISSION DIRECTOR, COLOMBIA:</b>	
James Megellan	Nov. 1975
<b>MISSION DIRECTOR, EL SALVADOR:</b>	
Peter Askin (acting)	Nov. 1977
Philip R. Schwab (acting)	July 1977
Edwin A. Anderson	Aug. 1973

a/Before 1977 the Office of Population was within the Bureau for Population and Humanitarian Assistance. The activities of that Bureau were merged into the new Bureau for Development Support.

## APPENDIX VII

## APPENDIX VII

	<u>Appointed or confirmed</u>
MISSION DIRECTOR, INDONESIA: Thomas C. Niblock	Aug. 1975
COUNTRY DEVELOPMENT OFFICER, MALI: Ronald D. Levin	Nov. 1974
MISSION DIRECTOR, PAKISTAN: Richard M. Cashin Joseph C. Wheeler	June 1977 Aug. 1969
MISSION DIRECTOR, PHILIPPINES: Peter M. Cody Garnett A. Zimmerly	Dec. 1976 July 1975
REGIONAL DEVELOPMENT OFFICER, SENEGAL: Norman M. Schoonover	Sept. 1974
AID REPRESENTATIVE, SRI LANKA: Thomas M. Arndt	Aug. 1976
COUNTRY DEVELOPMENT OFFICER, UPPER VOLTA: John A. Hoskins	Aug. 1974
MISSION DIRECTOR, THAILAND: Charles L. Gladson	July 1976